AMI-G3 System User Manual

V1.0

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HEXING

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1. Introduction

Scope The present user manual is designed for the AMI-G3 System Software Version 01.

Purpose This user manual not only provides functionality description and operation steps, but also focuses on instructions on how to use the software clearly.

Overview AMI-G3 system user manual contains the following parts:

seq	Parts
1	System Management
2	Asset Management
3	Installation Management
4	Time Synchronization Management
5	Message Query
6	Task Management
7	Data Reading Management
8	Parameter Management
9	Load Control
10	Terminal Diagnostic
11	Energy Losses Analysis
12	Firmware Upgrade
13	Meter Reading Data Management
14	Data Version Management
15	Plugin Management
16	Alarm Management

17	User Data Query
18	Single Device Query
19	Power Outage Analysis
20	Installation Coverage Analysis

Hexing Electrical reserves the right of final interpretation.

NOTE: Due to continuous improvement of the software, the screenshot shown in this user manual might be slightly different with the actual software interface. Information in this document is subject to change without notice. The information is accurate at the time of printing (March, 2013) © Hexing Electrical

2.Description of User interface

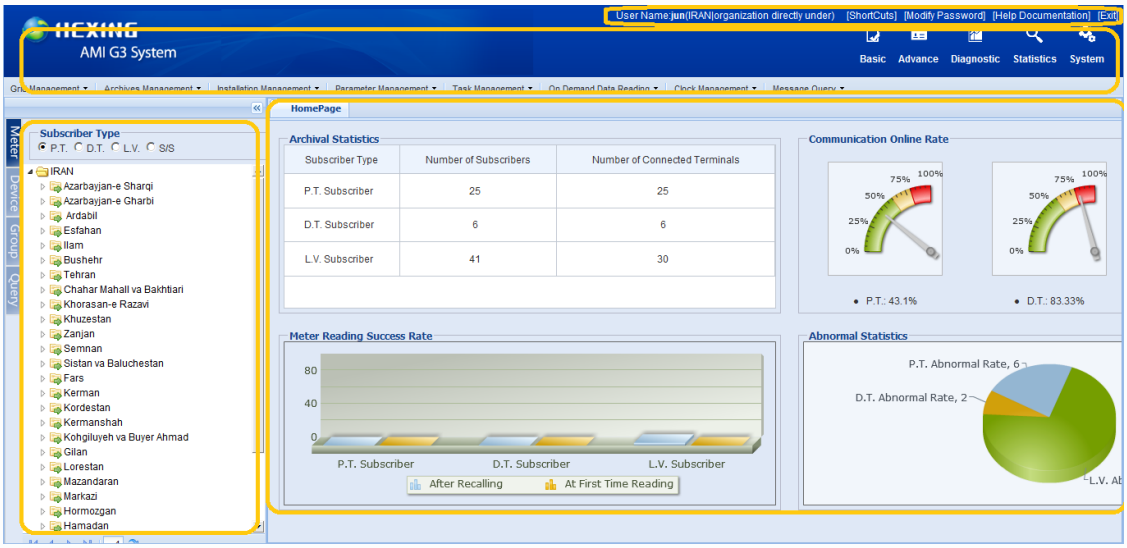


Figure 1 Main Frame

The user interface has the following components:

2.1.Menu Bar

Six function modules make up the system, which are Basic, Advance, Diagnostics and System, Prepay click on each function, dynamic switch detailed menu.

2.1. Navigation Tree

As the public module, the navigation tree can be used to connect with the other modules, consists of Meter and Query. The Meter displays the meter structure tree, with complete path of the meter installation and connection, including Power Utility, Feeder Line, Transformer Area and Transformer. The Query provides the query function of the meter, by which user can query the specific meter according to the requirement.

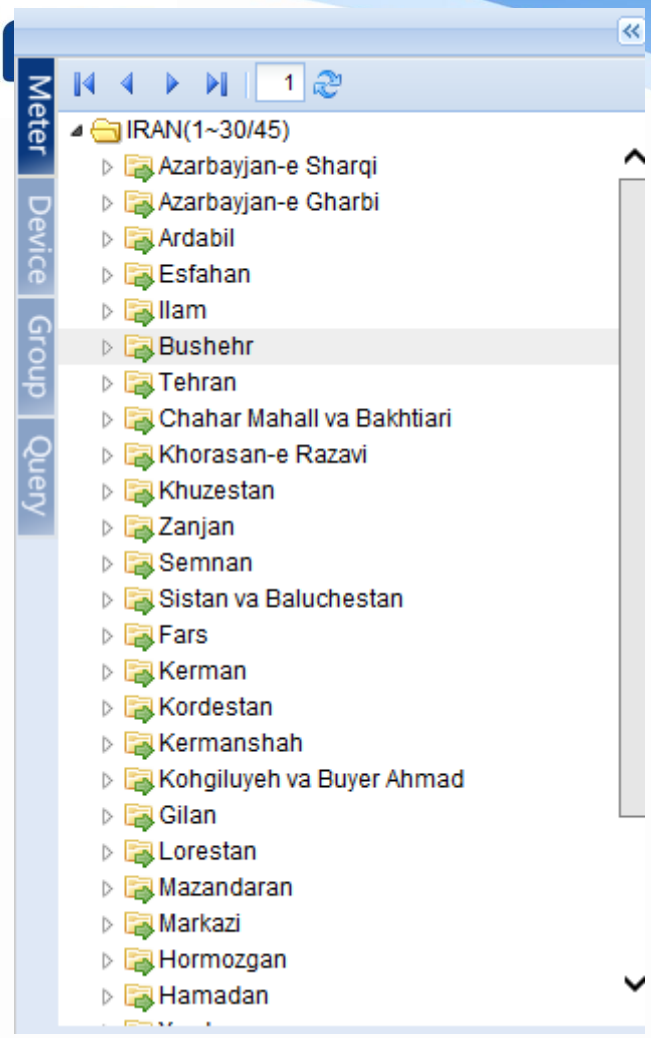


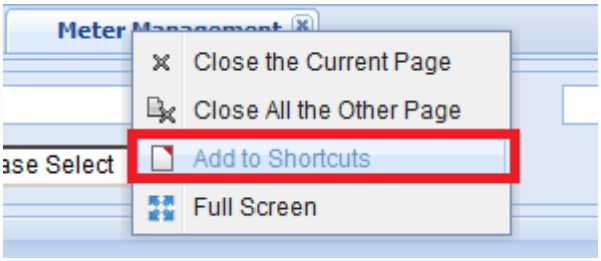
Figure 2 Navigation Tree

2.2. Tool Bar

Tool bar consists of **Abnormal Alarm**, **Shortcuts**, **My Information**, **Help**, and **Exit**.

Abnormal Alarm: Abnormal alarm the abnormal information generated

Shortcuts: Users can customize the system menu shortcut on the function tab by Right click menu.



,

Figure 3 Shortcuts

Modify Information: Modify user custom Information such as password;

Help: System online help document;

Exit: Logoff

Figure 4 Tool Bar

2.3. Operation Area

Operation area is used to show the system module. Choose a menu on the menu bar then the menu page will be shown in the operation area as the Tab form, more than one module can be shown at the same time.

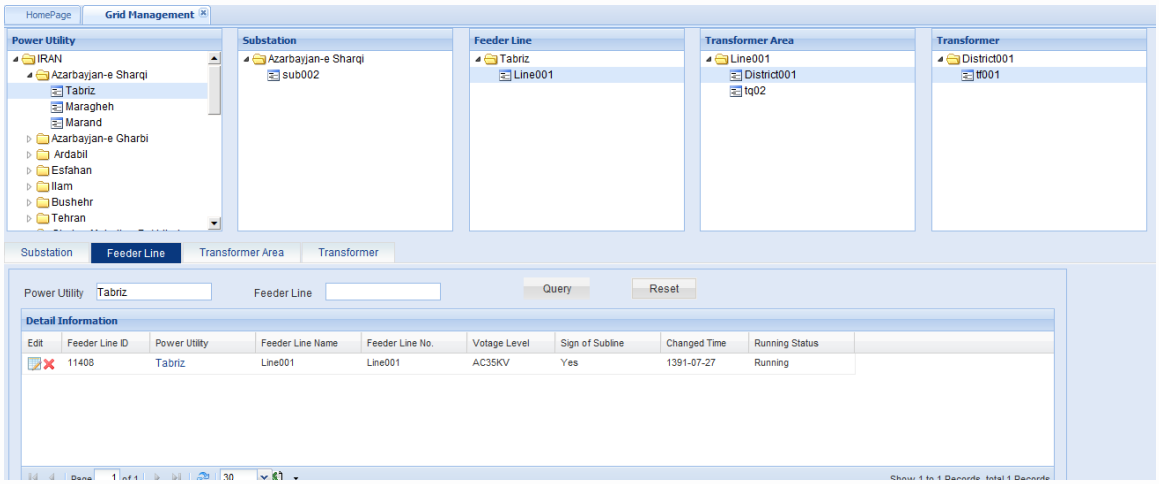


Figure 5 Operation Area

3. System Management

3.1. Permission Management

3.1.1. Operator Management

[Menu] System > Permission Management > Operator Management

[Function] Manage the operator of the system

[Step]

Add: In the list of operators, click “Add” button, assess to the add operator page, fill in the basic information as Department, ID, Name, Password, Confirm Password, Mobile, Telephone, Status, Bind IP, Date of Issue and so on. Then bound the role in the role list and allocate the assess permissions for the operator. The permissions to assess the operator’s department as default, finally click “Save” to finish the addition.

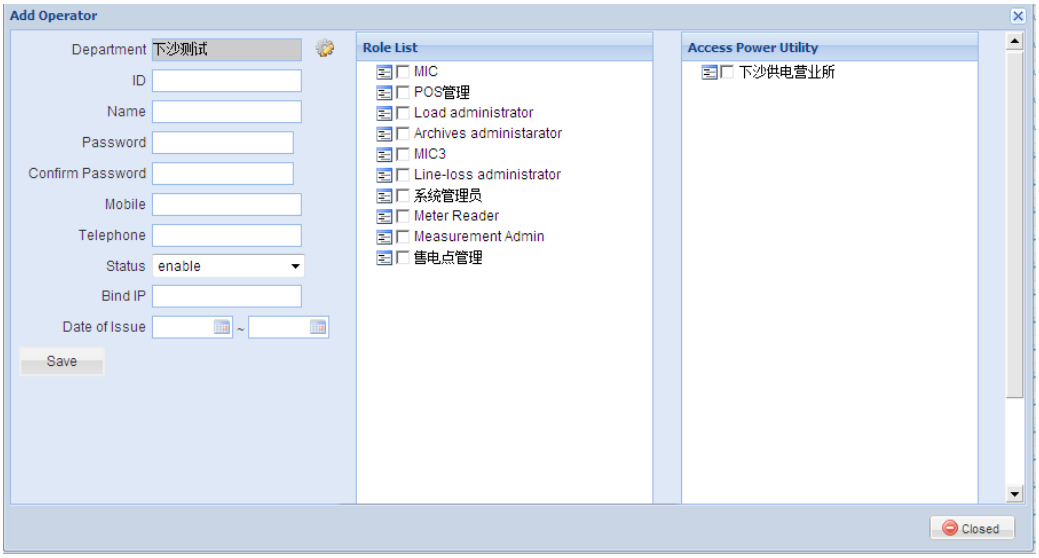


Figure 6 Add operator

Detele: Choose the operator who needs to be deleted in the operator list, click “Delete” in the operation bar, then click “OK” button in the pop-up window to finish the deletion.

Edit: Choose the operator who needs to be edited in the operator list, click “Edit” in the operation bar, modify the basic information, bound the role and access authority in the edit page, then click “Save” to finish the edition.

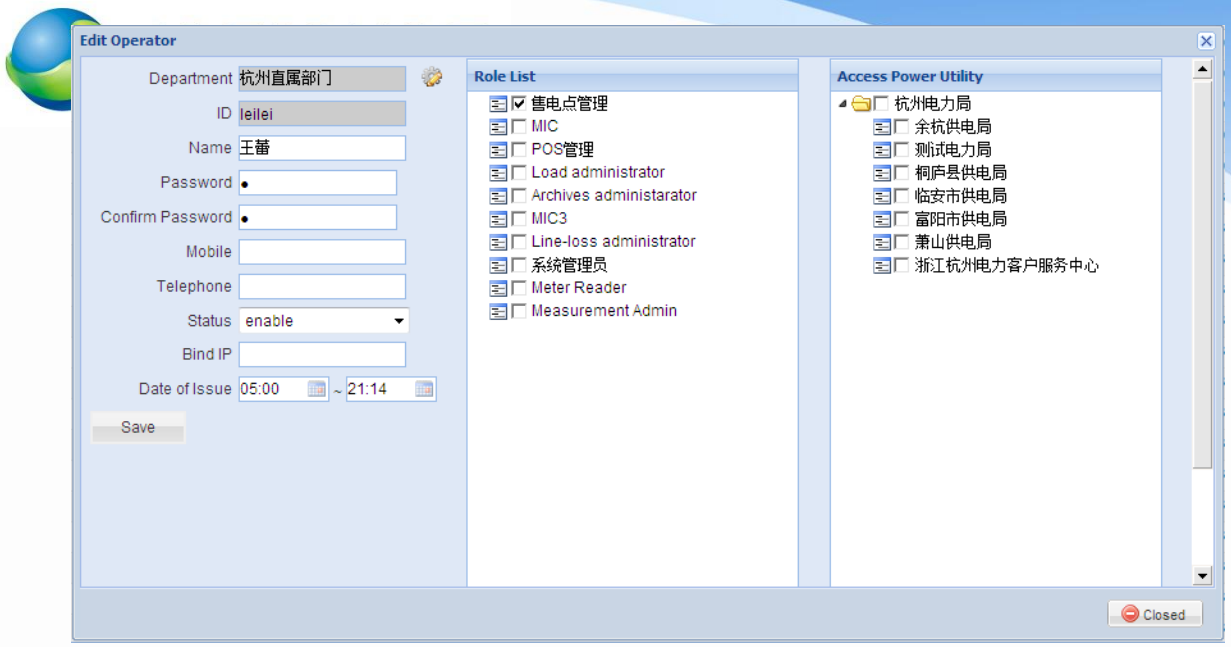


Figure 7 Edit Operator

Query: Input the information, such as Department, ID, Name, or Status, and click “Query”. Then the result will be shown in the operator list.

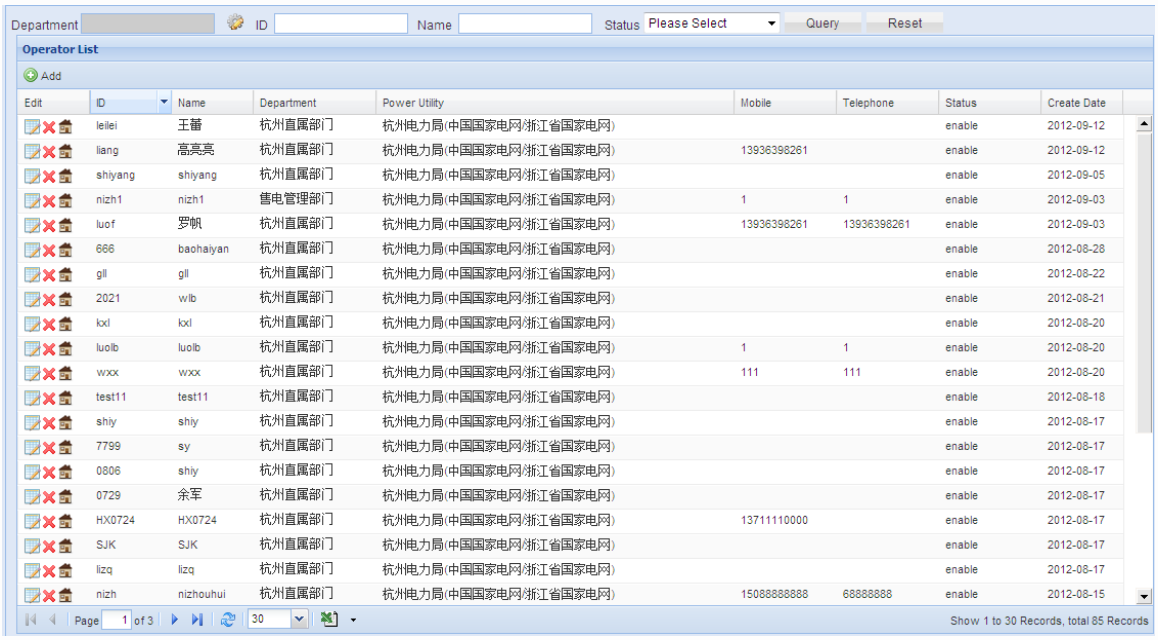


Figure 8 Query Operator

3.1.2. Role Management

[Menu] System > Permission Management > Role Management

[Function] Manage the role of the system

[Step]

Add: Click “Add” in the role list, fill in Role Name, choose menu assess permissions in the

menu list, choose operate permissions in the operating list, choose the default homepage in the homepage, choose the subscription item in subscription list, then click "save" to finish the addition.

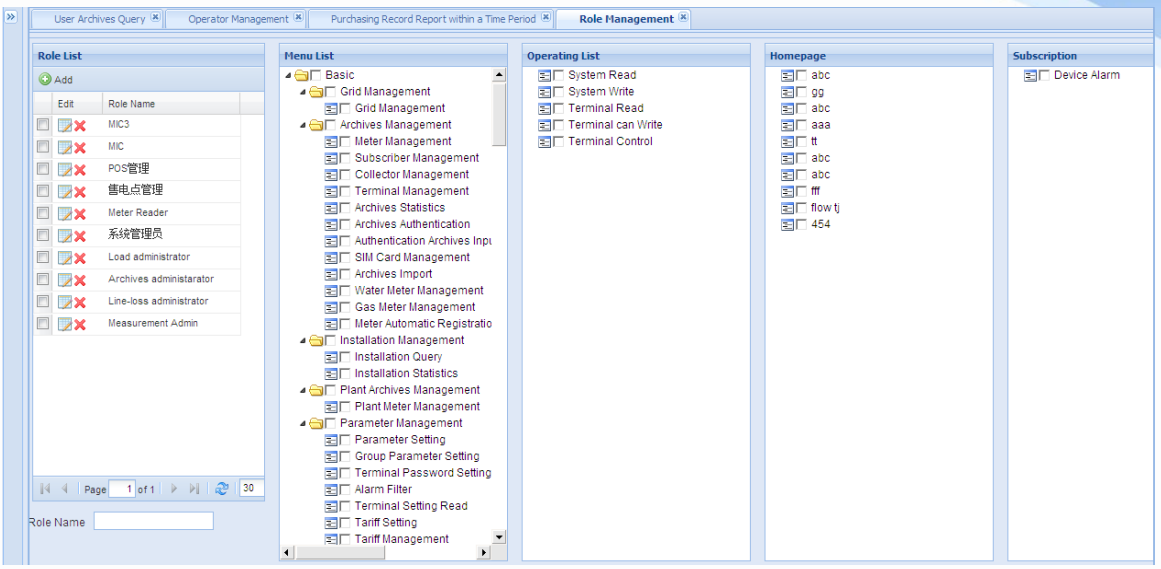


Figure 9 Add Role

Delete: Choose the role that will be deleted in the role list, click "Delete" in the operation bar, and then click "OK" in the pop-up window to finish the deletion.

Edit: Choose the role which will be edited in the role list, modify the name of the role, menu access authority, operation authority, default home page and subscription, click "Edit" to finish the edition.

3.1.3. Homepage Management

[Menu] System > Permission Management >Homepage Management

[Function] Manage all the homepages in the system; these pages can have various roles.

[Step]

Home page management is managed according to language, and different languages can be customized to a different home page.

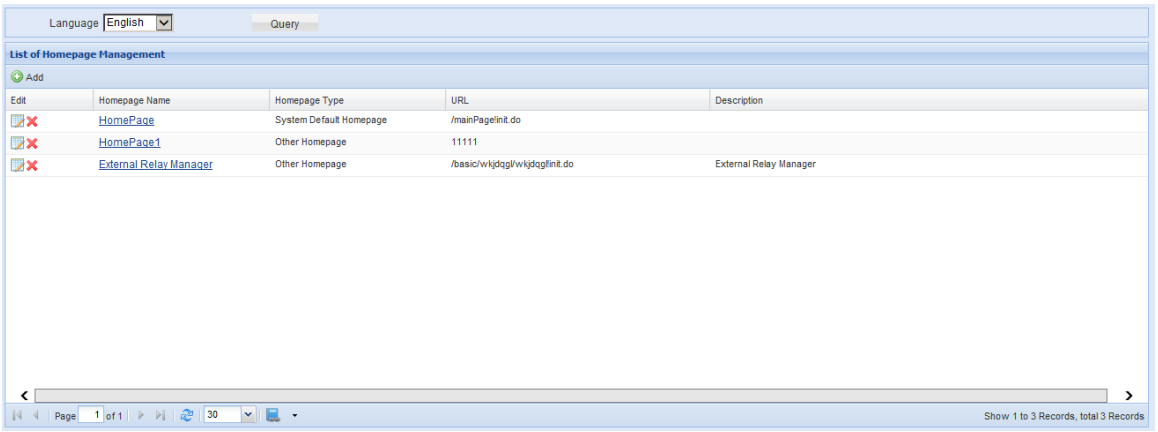


Figure 10 Main of Homepage

Add:

Click the "Add" button in the toolbar, a new window will pop up.

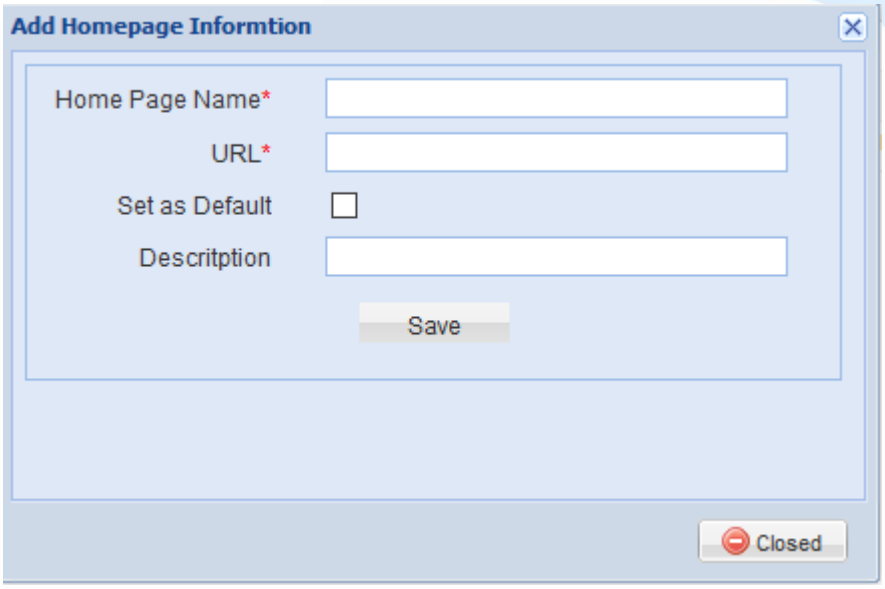


Figure 11 Add Home Page

Home Page Name:this item can not be empty.

URL:Home page function in the system corresponding to the address is a relative address, for example:/mainPage!init.do, it can not be empty.

Set as Default: Is set to the default home page? After set as default, all users will log on to the system default home page for the current Home.

Descritption:description information for home page

Edit:

Click the icon in the table of the main interface to enter the editing interface.

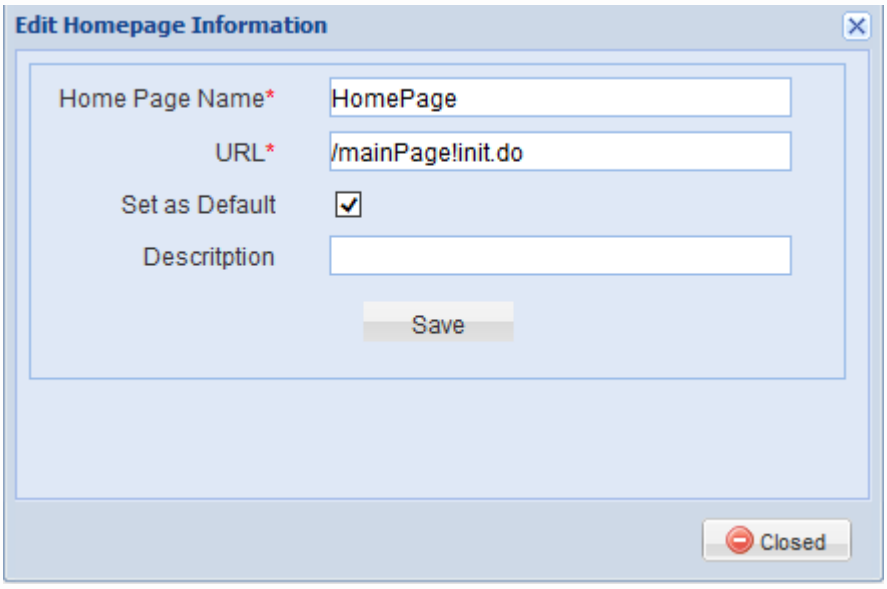


Figure 12 Edit Home Page

The other steps are the same as Add Function

Delete:

Click the icon ✖ in the table of the main interface to delete the selected home page.

3.2. Log Management

3.2.1. Archives Log

[Menu] System > Log Management > Archives Log

[Function] Audit the operation of the archives

[Step]

Input the formation, such as Function Menu, Operator, Operation Content, Start Date, and End Date, click “Query”, then the operation log of the archives will be shown in the log list. The information of the log includes Power Utility, Operator, Menu, Operating Type, Operate, Operating Time, and Operating Content.

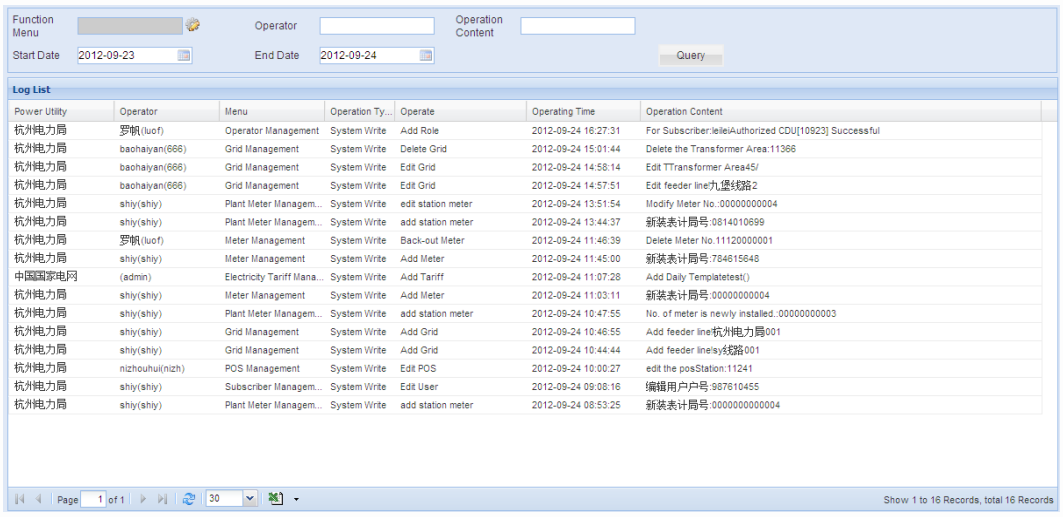

Function Menu
Operator
Operation Content
Start Date
2012-09-23
End Date
2012-09-24
Query
Log List
Power Utility | Operator | Menu | Operation Ty... | Operate | Operating Time | Operation Content
杭州电力局 | 罗帆(luof) | Operator Management | System Write | Add Role | 2012-09-24 16:27:31 | For Subscriber:leileiAuthorized CDU[10923] Successful
杭州电力局 | baohaiyan(666) | Grid Management | System Write | Delete Grid | 2012-09-24 15:01:44 | Delete the Transformer Area:11366
杭州电力局 | baohaiyan(666) | Grid Management | System Write | Edit Grid | 2012-09-24 14:58:14 | Edit TTransformer Area45/
杭州电力局 | baohaiyan(666) | Grid Management | System Write | Edit Grid | 2012-09-24 14:57:51 | Edit feeder line九堡线路2
杭州电力局 | shiy(shiy) | Plant Meter Managem... | System Write | edit station meter | 2012-09-24 13:51:54 | Modify Meter No.:00000000004
杭州电力局 | shiy(shiy) | Plant Meter Managem... | System Write | add station meter | 2012-09-24 13:44:37 | 新装表计局号:0814010699
杭州电力局 | 罗帆(luof) | Meter Management | System Write | Back-out Meter | 2012-09-24 11:46:39 | Delete Meter No.11120000001
杭州电力局 | shiy(shiy) | Meter Management | System Write | Add Meter | 2012-09-24 11:45:00 | 新装表计局号:784615648
中国国家电网 | (admin) | Electricity Tariff Mana... | System Write | Add Tariff | 2012-09-24 11:07:28 | Add Daily Templatetest()
杭州电力局 | shiy(shiy) | Meter Management | System Write | Add Meter | 2012-09-24 11:03:11 | 新装表计局号:00000000004
杭州电力局 | shiy(shiy) | Plant Meter Managem... | System Write | add station meter | 2012-09-24 10:47:55 | No. of meter is newly installed.:00000000003
杭州电力局 | shiy(shiy) | Grid Management | System Write | Add Grid | 2012-09-24 10:46:55 | Add feeder line杭州电力局001
杭州电力局 | shiy(shiy) | Grid Management | System Write | Add Grid | 2012-09-24 10:44:44 | Add feeder lineSy线路001
杭州电力局 | nizhouhui(nizh) | POS Management | System Write | Edit POS | 2012-09-24 10:00:27 | edit the posStation:11241
杭州电力局 | shiy(shiy) | Subscriber Managem... | System Write | Edit User | 2012-09-24 09:08:16 | 编辑用户户号:987610455
杭州电力局 | shiy(shiy) | Plant Meter Managem... | System Write | add station meter | 2012-09-24 08:53:25 | 新装表计局号:0000000000004
Page 1 of 1
30
Show 1 to 16 Records, total 16 Records

Figure 13 Archives Log

3.2.2. Login Log

[Menu] System > Log Management > Login Log

[Function] Audit the log in system of the operator

[Step]

Choose a Power Utility on the left tree, input Operator, IP and Date of Issue, and click “Query”, the login logs will be shown in the login log list. The information of the login log includes ID, Operator Name, Power Utility, Login Time, Logout Time, IP and Session ID.

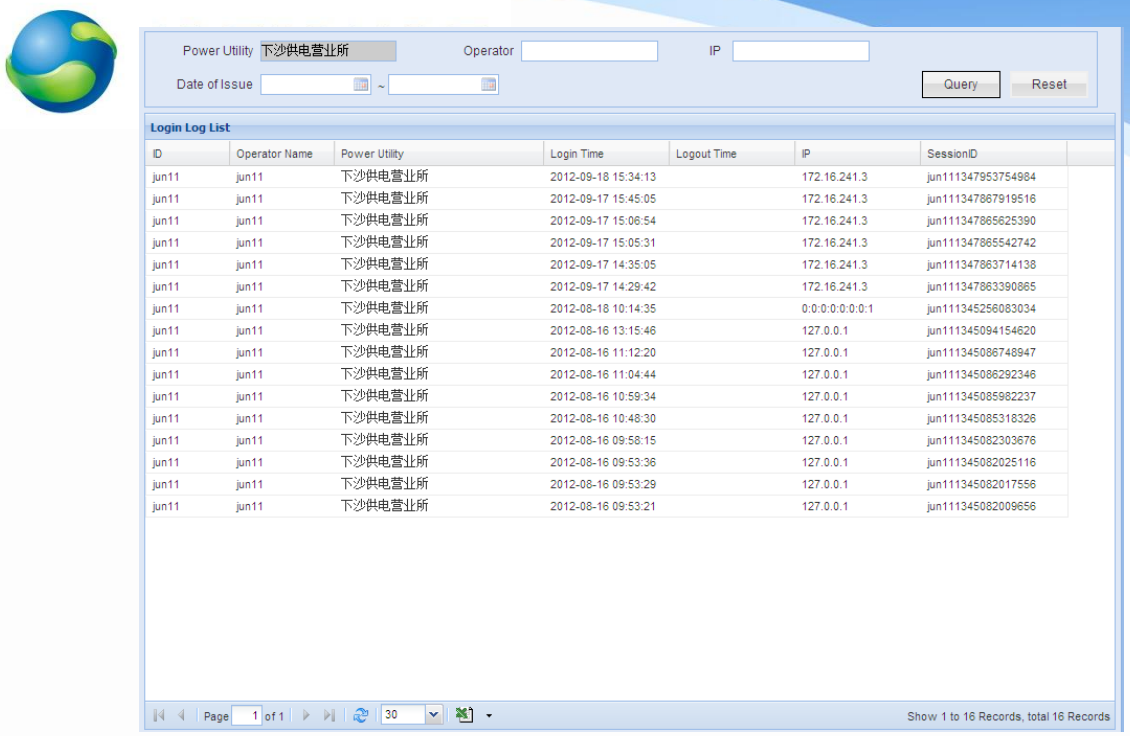


Figure 14 Login Log

3.2.3. Communication Log

[Menu] System > Log Management > Communication Log

[Function] Audit the communication log between the system and meter

[Step]

Query the communication log information of the current user area as page default, and choose a Power Utility on the left tree to customer query. The system supports fuzzy query according to the operator, terminal board number, and OBIS Descriptions at the same time.

The communication log includes Power Utility, OBIS Descriptions, Terminal NO., Log Content, Operating Time, Operating Time, Operating Mode, Operator, and IP.

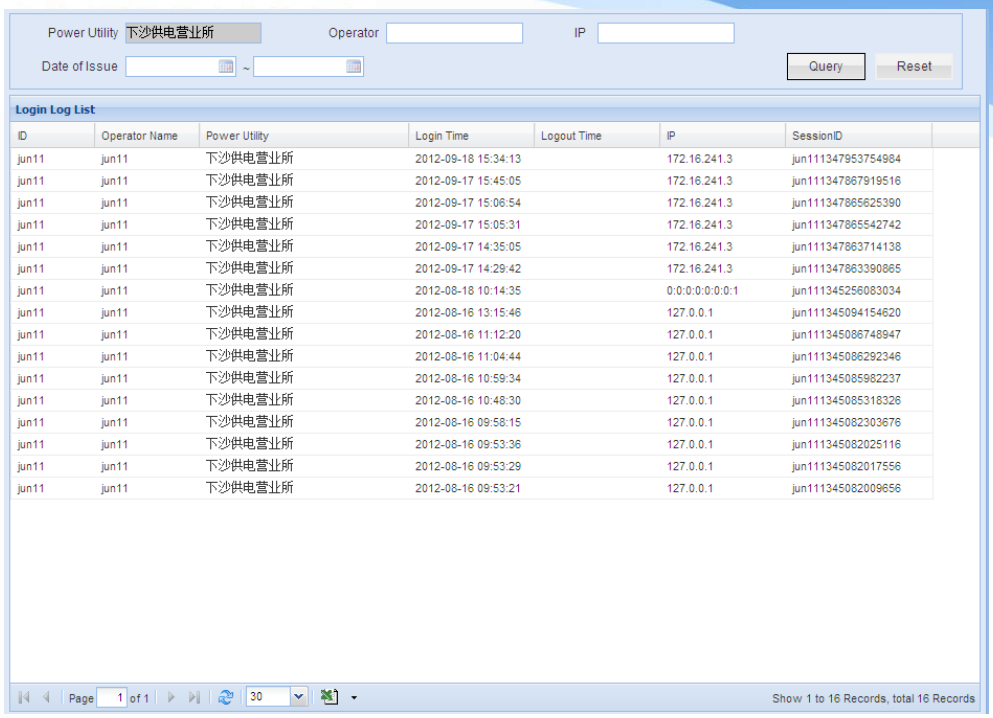


Figure 15 Communication Log

3.3. Data Dictionary

3.3.1. Data Dictionary

[Menu] System> System Parameter Definition > Data Definition

[Function] Manage the data code of the system

[Step]

Add code classification: click “Add” in the code classification, go to the Add Classification page, and fill in the Code Classification Name and Code Classification No, then click “Save” to finish the addition.

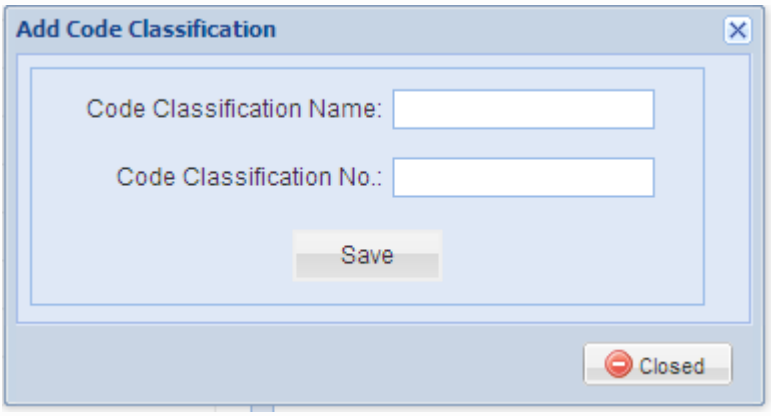


Figure 16 Add Code Classification

Add code value: choose the code classification which will be added the new code in the code

classification list, click on "Add" in the code list, fill in Code Name and Code Value, and then click "Save" to finish the addition.

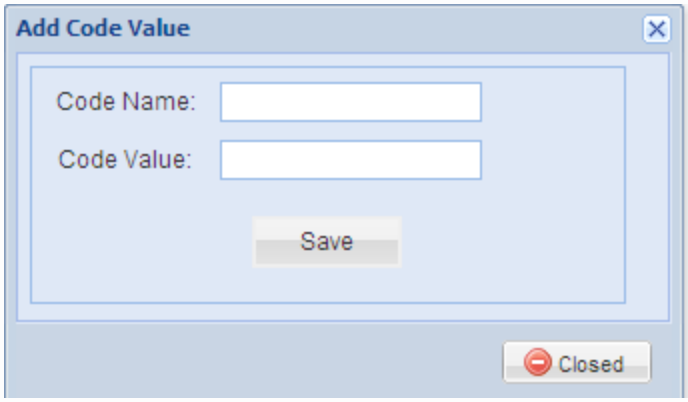


Figure 17 Add Code

Delete code classification: choose the code classification which needs to be deleted in the code classificaion list, click "Delete" in the operation bar, then click "OK" in the pop-up window to finish the deletion.

Delete code value: choose the code which needs to be deleted in the code list, click "Delete" in the operation bar, then click "OK" in the pop-up window to finish the deletion.

Edit code classification: choose the code classification in the code classification list, click "Edit" in the operation bar, go to the Modify Code Classification page, modify "Code Classificaiton Name" and "Code Classification No.", then click "Save" to finish the edition.

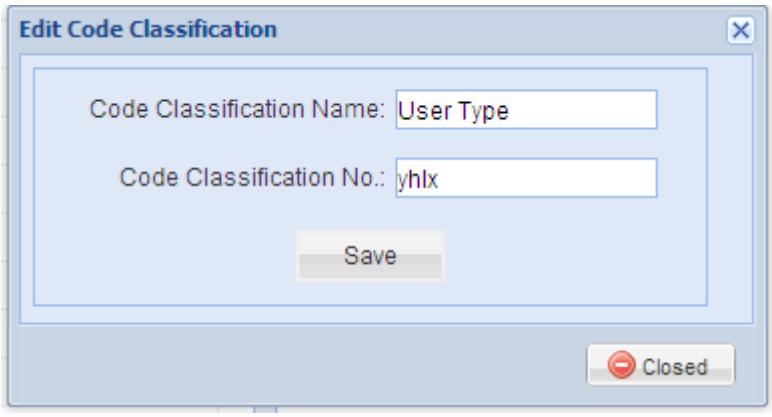


Figure 18 Edit Code Classifications

Edit code value: choose a code classification in the code classification list, choose the code that needs to be edited in the code list, click "Edit" in the operation bar, modify "Code Name" and "Code Value", then click "Save" to finish the edition.

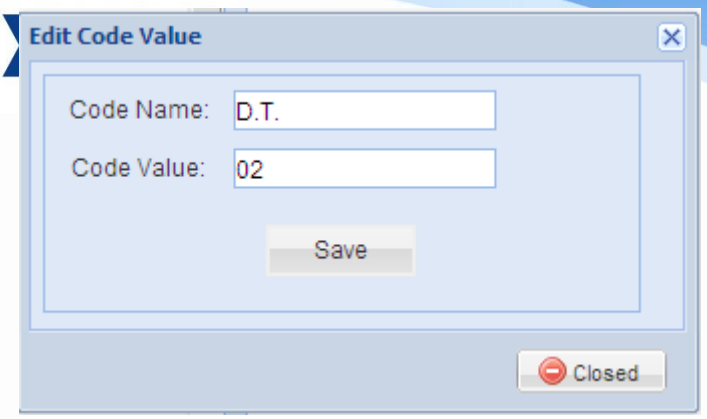


Figure 19 Edit code value

Query code classification: input language and Code Classification Name, click “Query”, the code classification will be shown in the code classification list according to the query condition, and the first code in the code classification will be displayed at the same time.

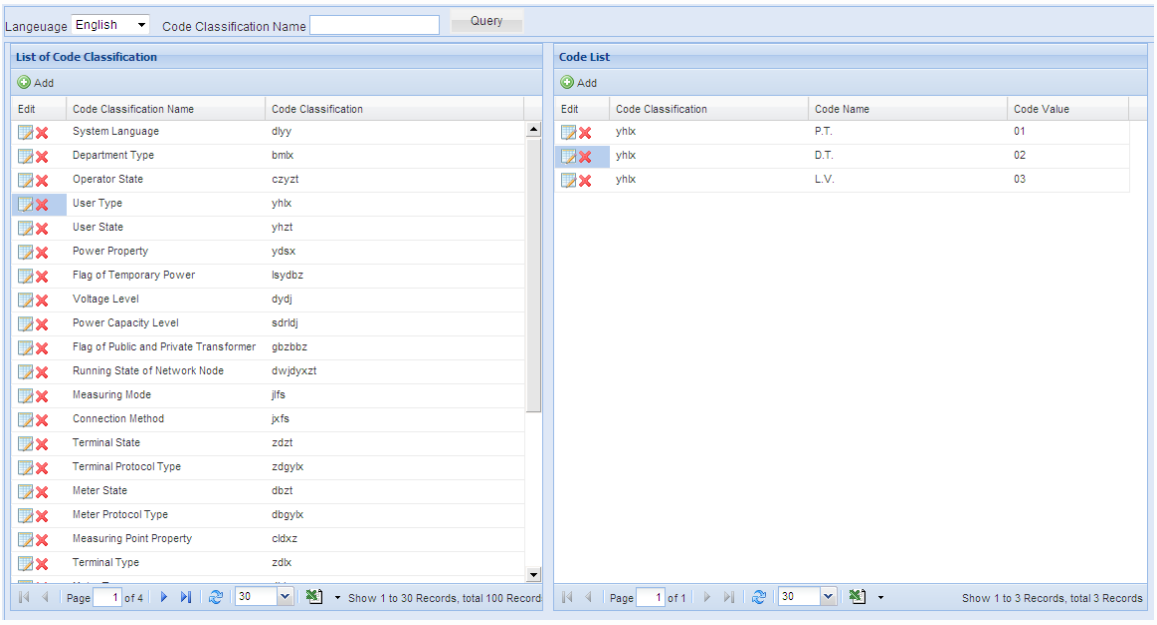


Figure 20 Query Code Classifications

Note!

When the classification is deleted, all the code values contained in it will also be deleted at the same time.

4. Asset Management

4.1. Organization Management

[Menu] System > Organization Management > Organization Management

[Function] Manage the entire area organization.

[Step]

Select a Power Utility node on the left tree, all organizations under it will be shown in the list of the organization automatically.

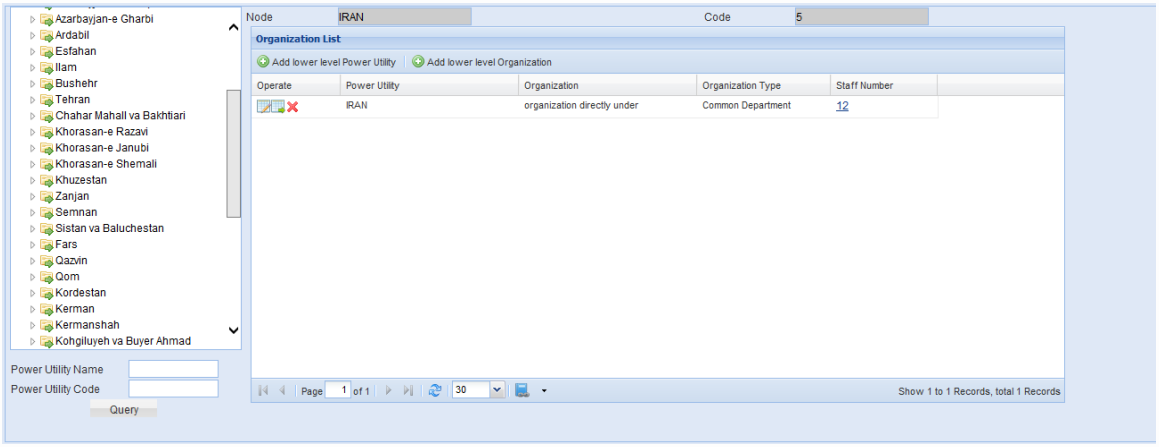


Figure 21 Organization list

Add power utility of lower levels: click “Add power utility of lower levels” in the organization list, go to the Add Power Utility page, fill in Power utility, and then click “Save” to finish the addition.

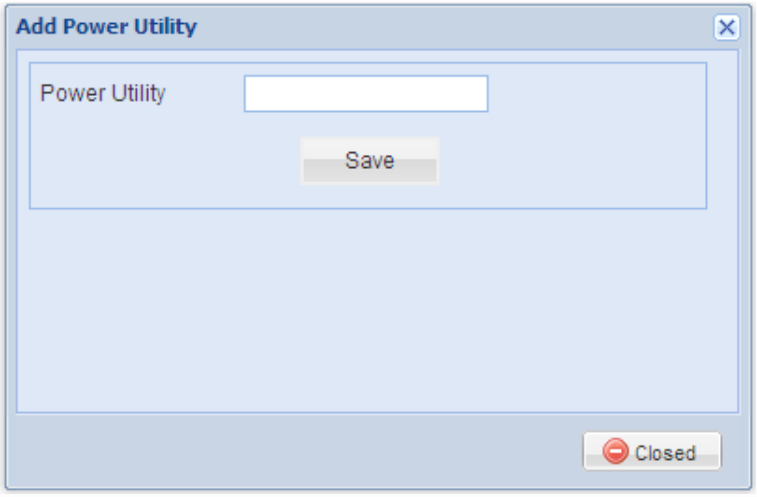


Figure 22 Add Power Utility

Add lower level Organization: click “Add lower level Organization” in the organization list, fill in Organization Name, then click “Save” to finish the addition.

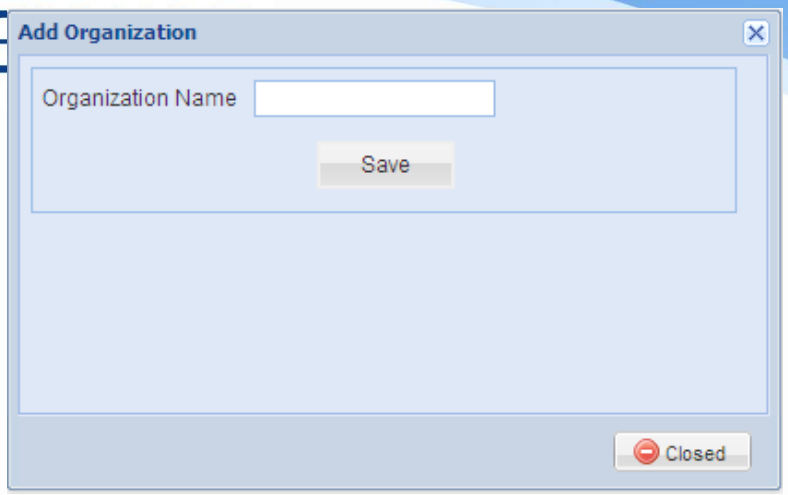


Figure 23 Add Organization

Update organization information: select the organization you want to modify, click "Edit Organization" in the operation toolbar, enter the update function, and fill in: Organization Name, click "Save" button to finish update.

Figure 24 Update Organization

Modify permission: choose the organization that needs to be modified in the organization list, click "Edit" in the operation bar, go to the Permission Modification page and modify the permission. If the operator permission needs to be covered, choose "Cover the operator permissions", and then click "Modify permissions" to finish the modification.

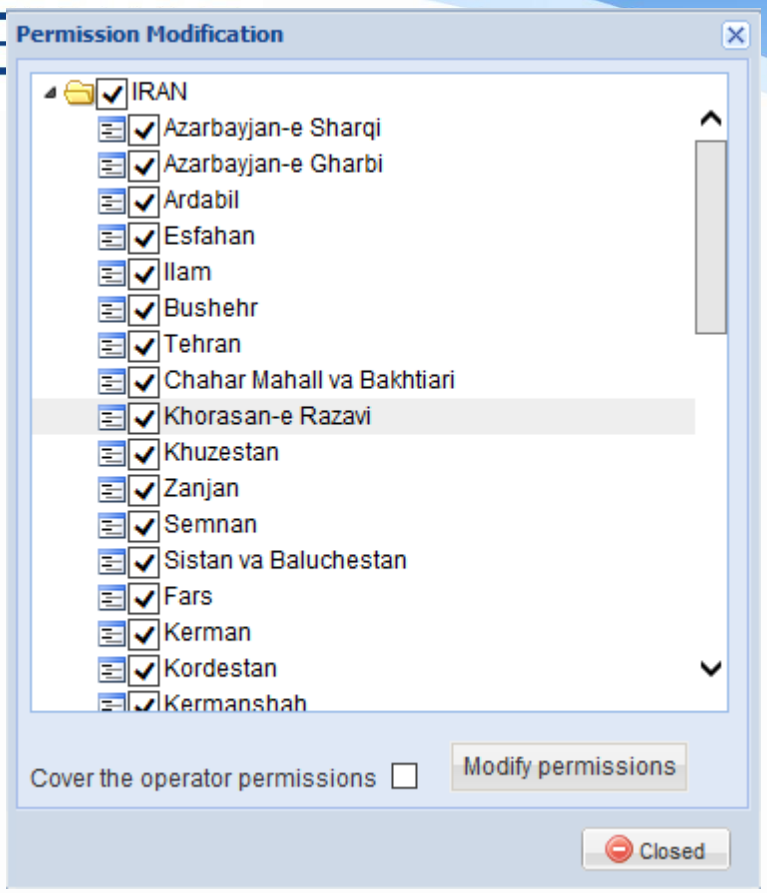


Figure 25 Permission modification

Delete organization: choose the organization that needs to be deleted in the organization list, click "Delete" in the operation bar, and then click "OK" in the pop-up window to finish the deletion.

Query Power Utility Information: At the bottom of the left tree, fill in "Power Utility Name" or "Power Utility Code", and click "Query" button to query the power utility detail information.

Figure 26 Power Utility Information

Note!

Not all the power utilities can be added the in the lower level power utility, levels are controlled by the system.

Organization can be deleted only when the number of the stall in the organization is zero.

4.2. Power Grid Management

[Menu] Basic > Grid Management > Grid Management

[Function] Manage the entire power grid

[Step]

Add feeder line: choose a utility in the utility tree, and all the feeder lines under the utility will be shown in the feeder line window automatically. Right click the utility, choose “Add Feeder Line”, go to the “add feeder line” page, and fill in Feeder Line No., Feeder Line Name, Feeder Line Voltage, Sign of Branch Line and Running Status, then click “Save” to finish the adding.

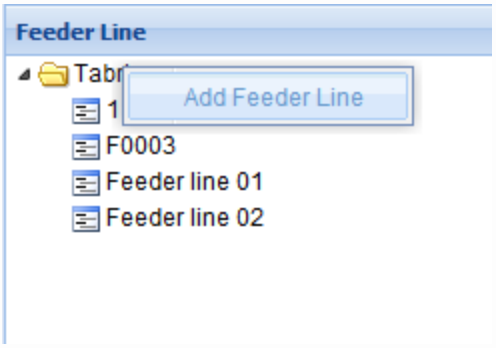


Figure 27 Newly Added Feeder Line Menu

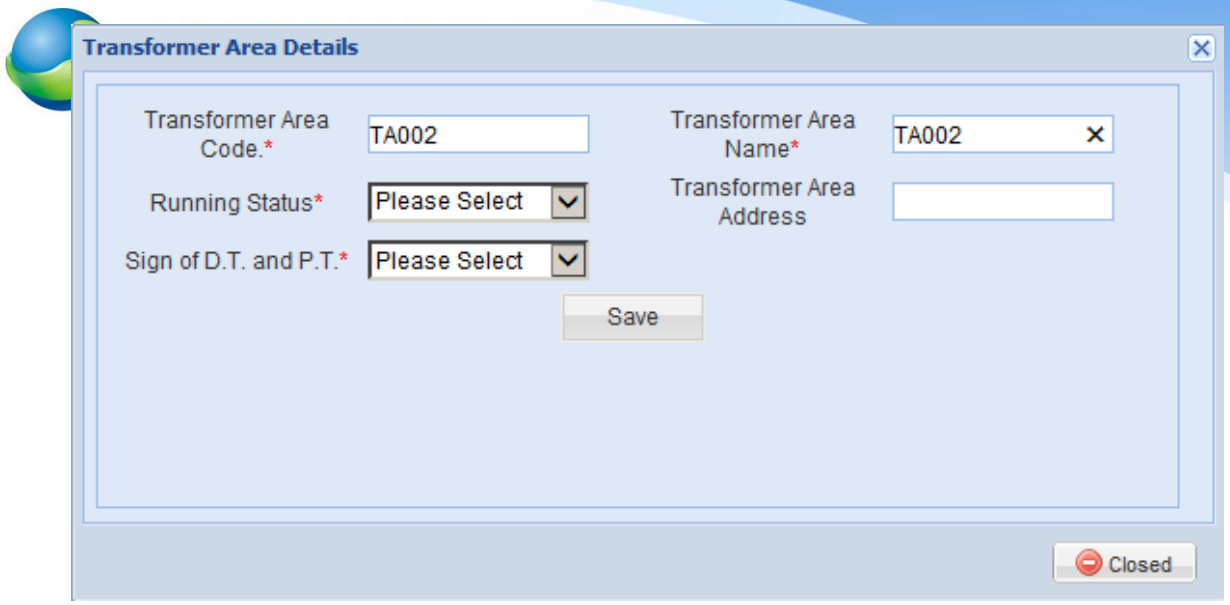


Figure 28 Feeder Line Details

Modify Feeder Line: Right click one feeder line in the Line tree, choose “Edit Node” menu to enter the modify line interface. Modify the feeder line information, click “Save” button to complete the feeder line modification.

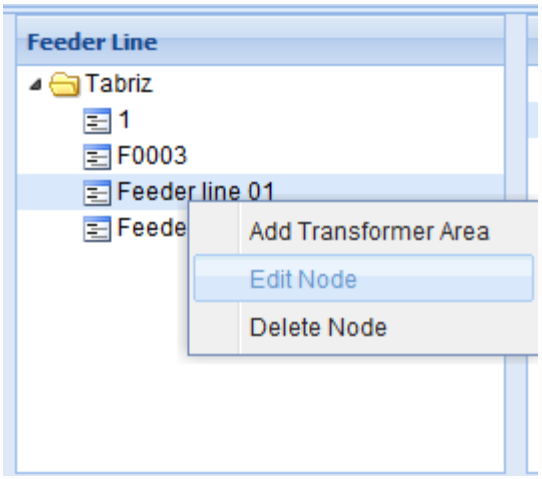


Figure 29 Modify Feeder Line Menu

Figure 30 Modify Line

Delete Feeder Line: Right click one line in the line tree, choose “Delete Node” Menu, Click “OK” button to complete line deleting.

Newly Added Transformer Area: choose one line of the line tree, and then all the transformer areas will be shown in the window. Right click this line and choose “Add Transformer Area” menu to enter the interface of newly added transformer area. Fill in Transformer Area Code, Transformer Area Name, Running Status, Transformer Area Address, Sign of D.T. and P.T.. Click “Save” button to complete the adding of new transformer area.

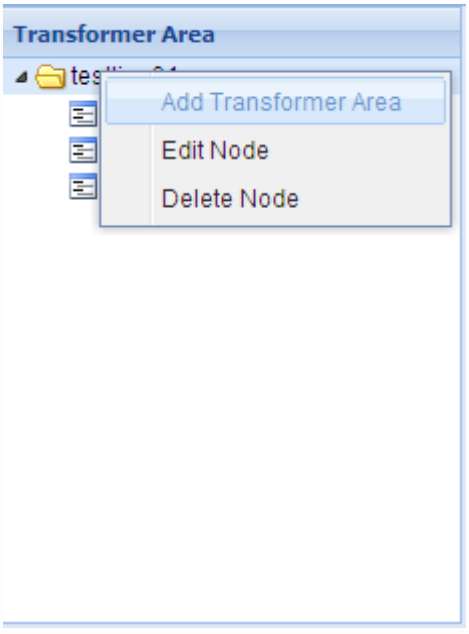


Figure 31 Newly Added Transformer Area Menu

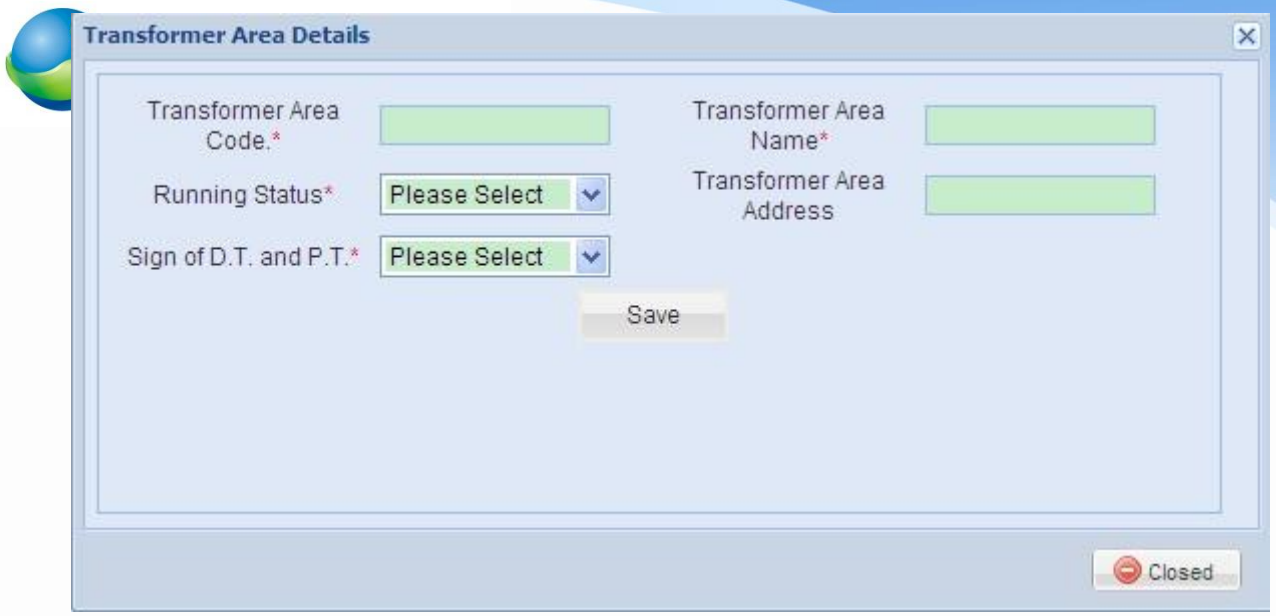


Figure 32 Newly Added Transformer Area Menu

Modify Transformer Area: Right click one transformer area in the transformer area tree and choose “Edit Node” Menu. Enter the modification interface to modify the transformer area information. Click “Save” button to complete the modification of transformer area.

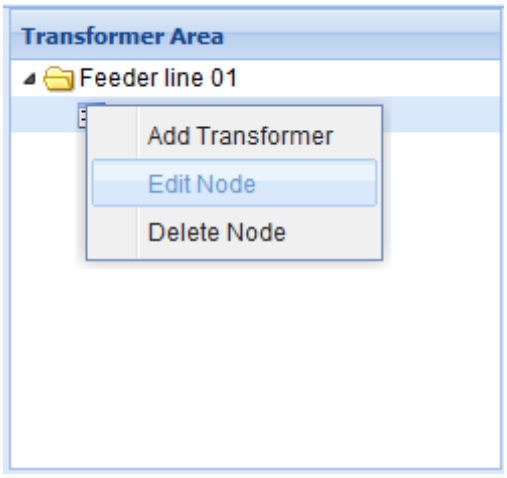


Figure 33 Modify Transformer Area Menu

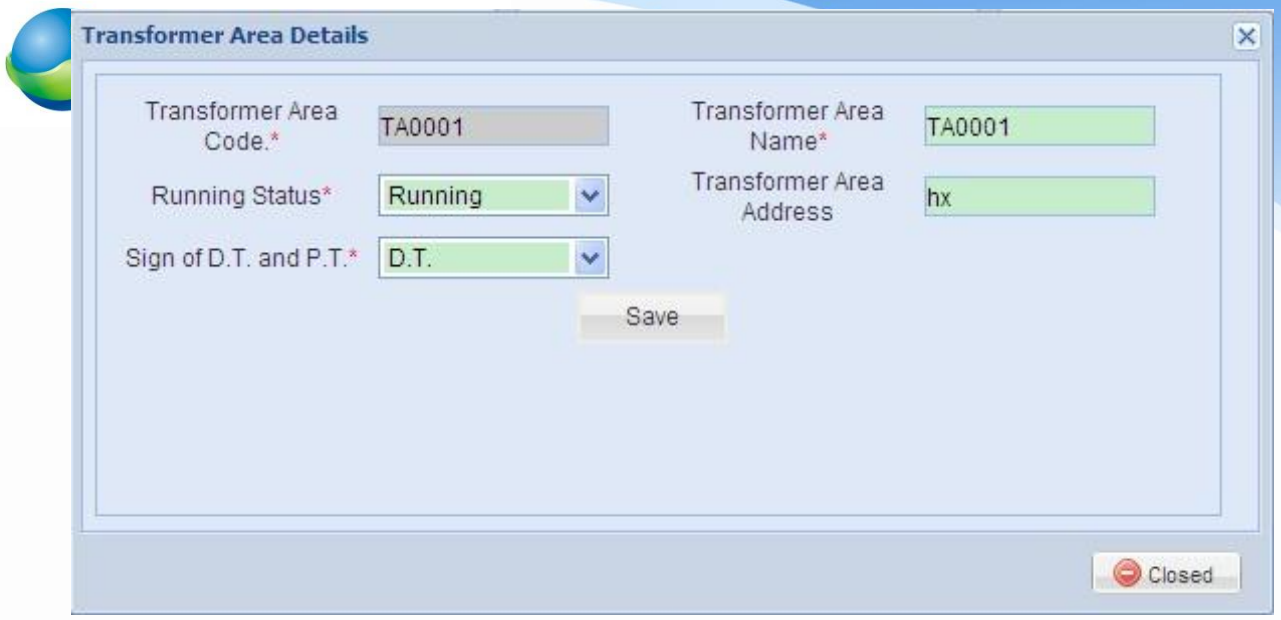


Figure 34 Modify Transformer Area

Delete Transformer Area: Right click one transformer area in the transformer area tree and choose “Delete Node” menu. Click “OK” button in the pop-up window to complete the deleting of transformer area.

Newly Added Transformer: Choose one transformer area from the transformer area tree, then all the transformers in this transformer area will be shown automatically in the transformer window. Right click this transformer area, choose “Add Transformer” menu, and enter the interface of “newly added transformer”. Fill in Transformer, Installation Address, Nameplate Capacity, Running Status, Property, Sign of D.T. or P.T., Device Model, and click “Save” button to complete the adding of new transformers.

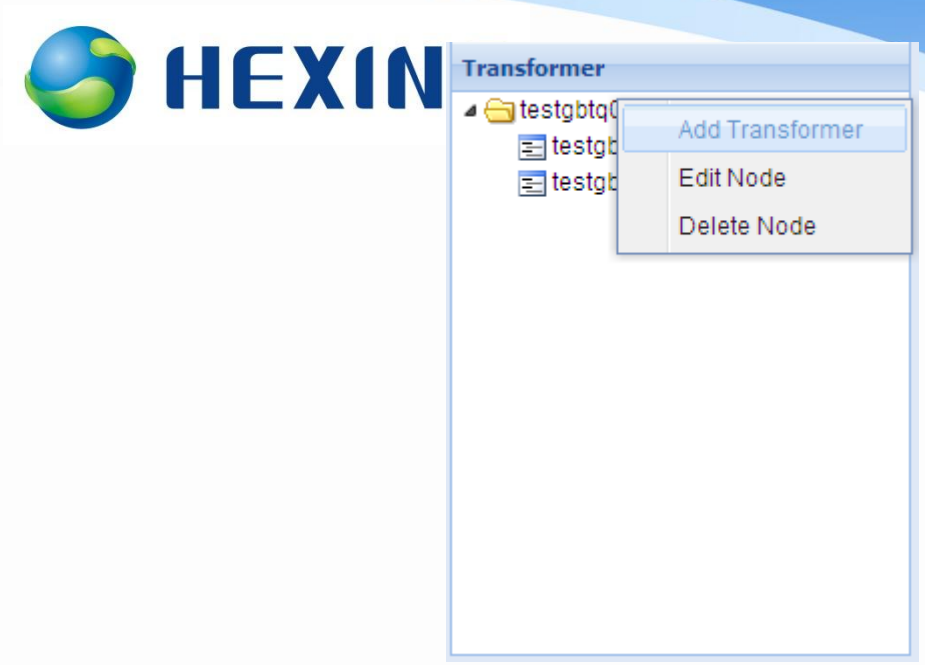


Figure 35 Newly Added Transformer Menu

Figure 36 Newly Added Transformer

Modify Transformer: Right click one transformer in the transformer tree and choose “Edit Node” menu. Enter the interface of modifying transformer. Modify the transformer information, and click “Save” button to complete the transformer information modification.

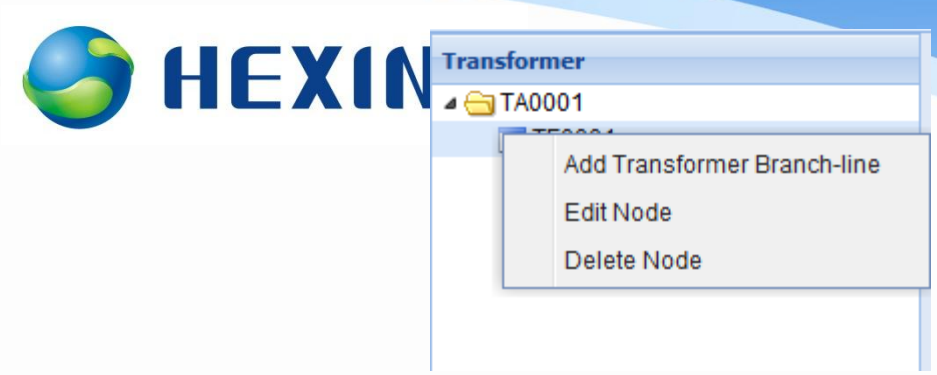


Figure 37 Modify Transformer Menu

Figure 38 Modify Transformer

Delete Transformer: Right click one transformer in the transformer tree and choose "Delete Node" menu. Click "OK" button in the pop-up window to complete the deleting of transformer.

Newly Added Transformer Branch Line: Choose one transformer from the transformer tree, then all the transformer branch lines under this transformer will be shown automatically in the transformer branch line window. Right click this transformer and choose "Add Transformer Branch-line" menu to enter the interface of newly added transformer branch line. Fill in Line No., Line Name, Line Voltage, Running Status, and click "Save" button to complete the adding of new transformer branch line.

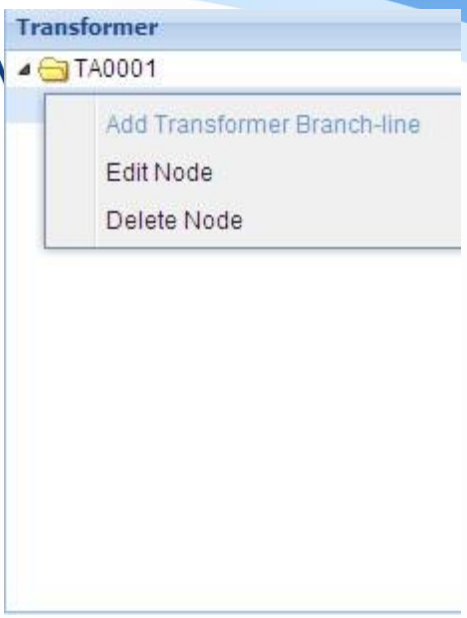


Figure 39 Newly Added Transformer Branch Line Menu

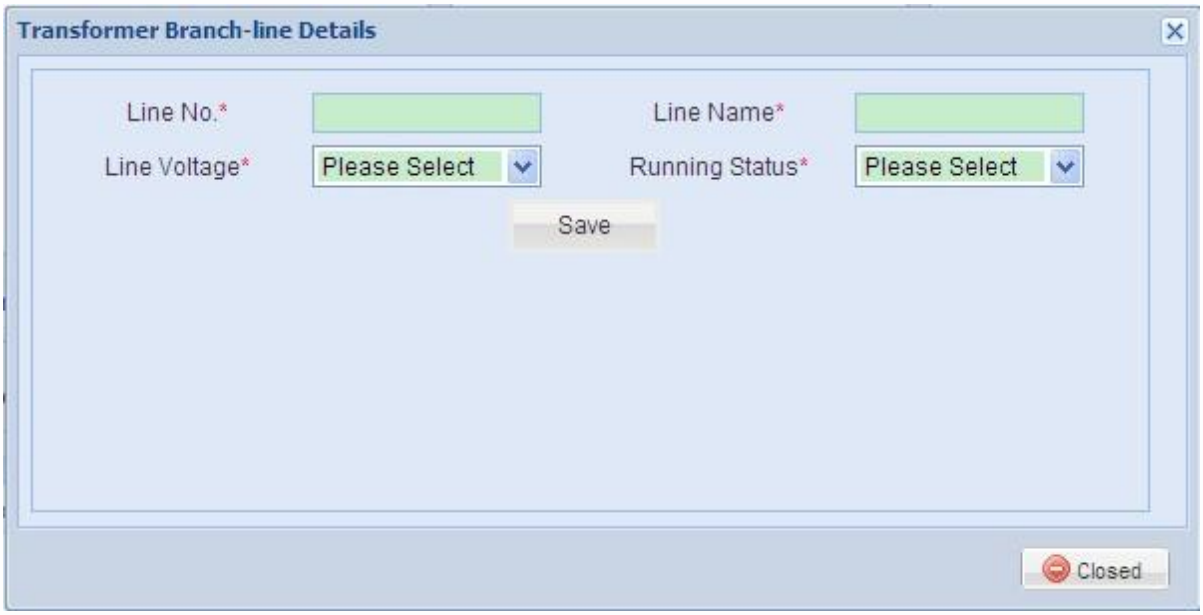


Figure 40 Newly Added Transformer Branch Line

Modify Transformer Branch Line: Right click one transformer in the transformer branch line tree, choose “Edit Node” menu to enter the interface of modifying transformer branch line. Modify the information of transformer branch line, and click “Save” button to complete the modification of transformer branch line.

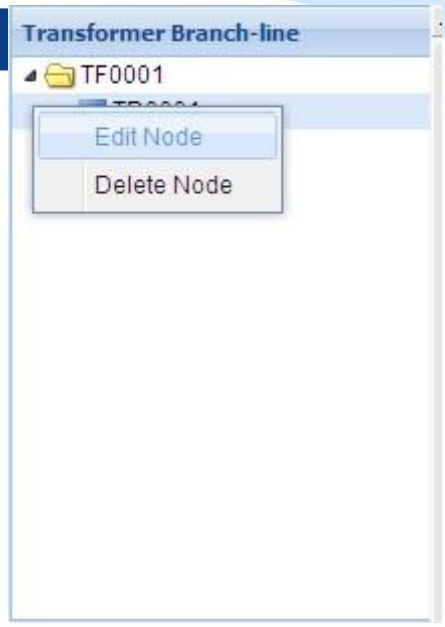


Figure 41 Modify Transformer Branch Line Menu

Figure 42 Modify Transformer Branch Line

Delete Transformer Branch Line: Right click one transformer branch line in the transformer branch line tree, and choose “Delete Node” menu. Choose “OK” button in the pop-up window to complete the deleting of transformer branch line.

Query Details: click “Feeder Line” button and choose one Power Utility in the Power Utility tree. Fill in Feeder line, and click “Query” button to check the details of the feeder line. You can also modify or delete this feeder line in the operation bar.

Click “Transformer Area” button and choose one Power Utility in the Power Utility tree. Fill in Transformer Area, Transformer Area Type, and click “Query” button to

check the details of transformer area. You can also modify or delete this transformer area in the operation bar.

Click “Transformer” button and choose one Power Utility in the Power Utility tree. Fill in Transformer, Transformer Type, and click “Query” button to check the details of transformer. You can also modify or delete this transformer in the operation bar.

Click “Transformer Branch-line” button and choose one Power Utility in the Power Utility tree. Fill in Transformer Branch-line, and click “Query” button to check the details of transformer branch line. You can also modify or delete this transformer branch line in the operation bar.

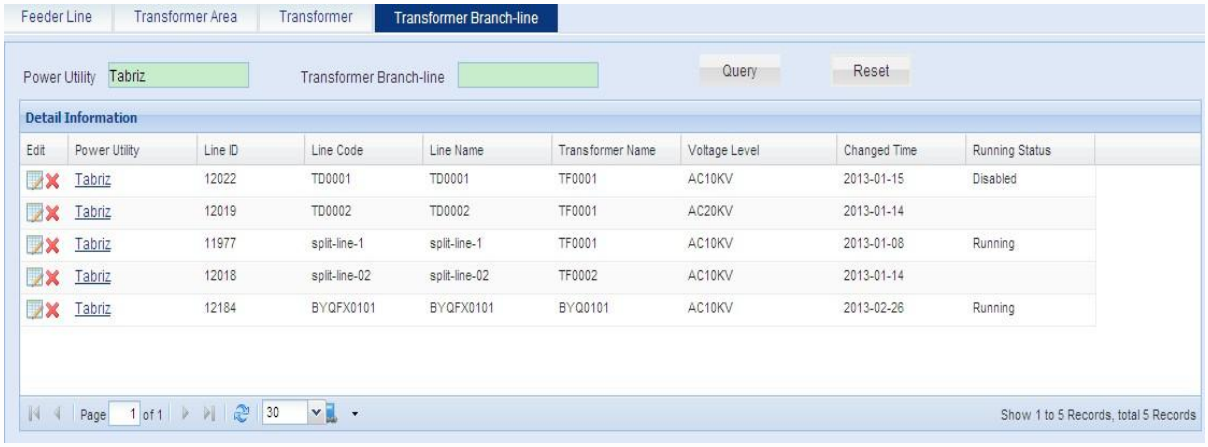


Figure 43 Check Power Utility

Note!

If you need to delete the feeder line, make sure it does not contain any transformer area before the deletion.

If you need to delete the transformer area, make sure it does not contain any transformer before the deletion.

If you need to delete the transformer, make sure it does not contain any transformer branch line before the deletion.

4.3. Meter Management

[Menu] Basic > Archives Management > Meter Management

[Function] Management of all meters in the system

[Step] Add New Meter: In the meter management list, click “Add” button to enter the Create New Meter page. Fill in Meter No, Power Utility, Meter Type and other information. Those items marked with “*”are mandatory, the rest are optional. Click “Save” button to complete the adding of new meter. The Create New Meter interface is shown as below.

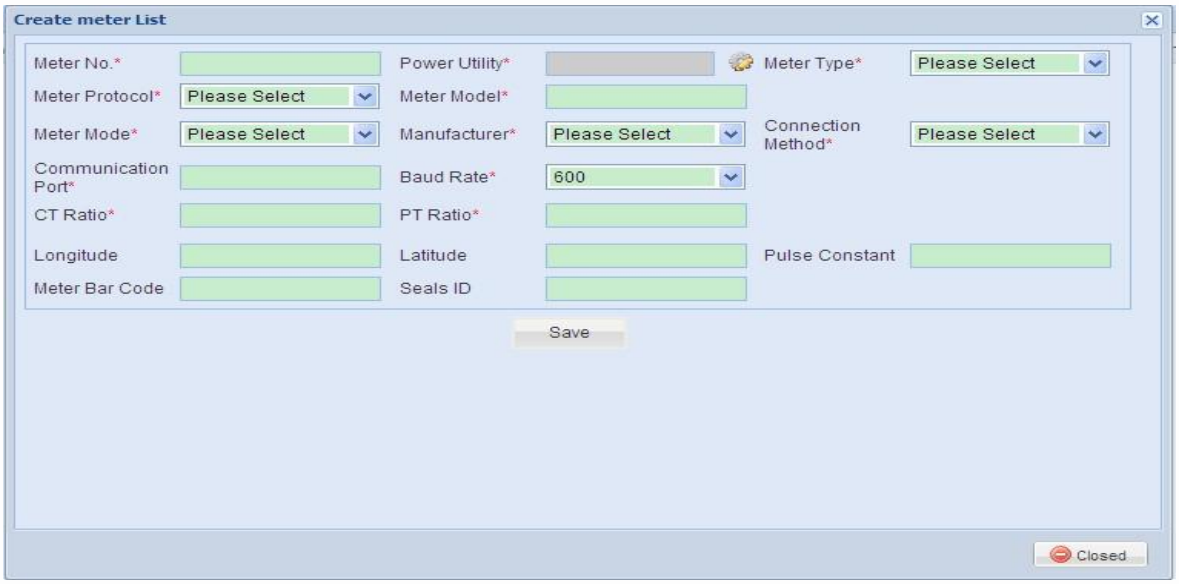


Figure 44 Create New Meter

Delete Meter: Find out the meter that needs to be deleted in the meter management list, and click “Delete” button in the operating bar. Then click “OK” button in the pop-up window to complete the deleting of meter.

Modify Meter: Find out the meter that need to be modified in the meter management list, and click “Edit” button in the operating bar to enter the meter editing window. Modify the property of the meter, then click the “Save” button to complete the modification of meter. The modifying interface is as shown below.

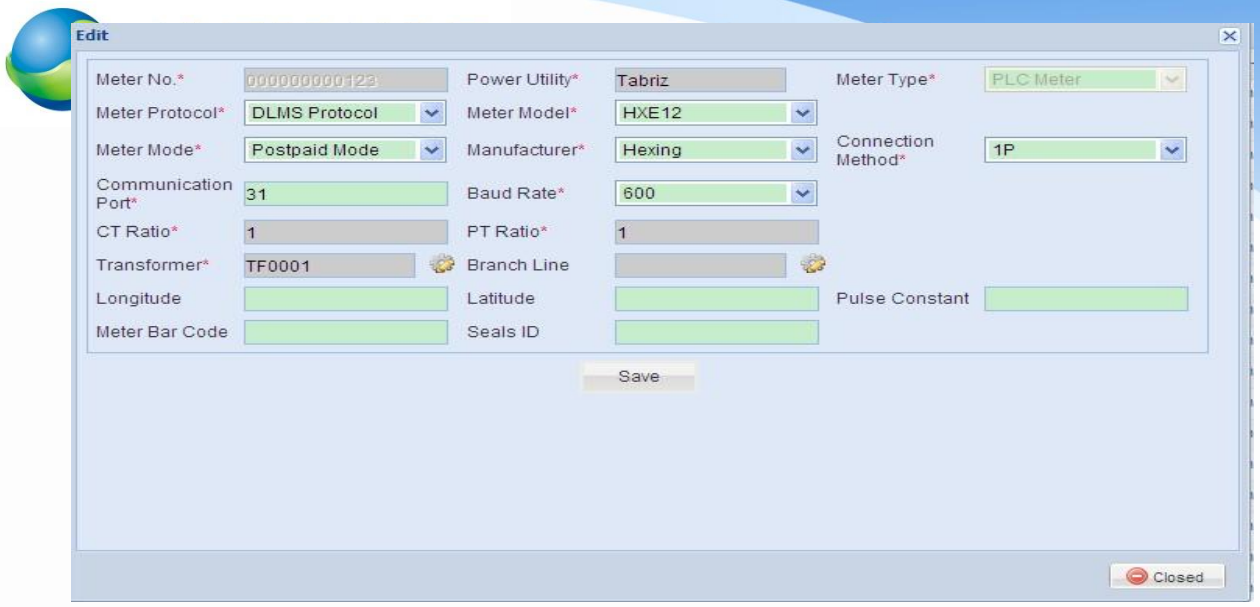


Figure 45 Edit Meter Information

Query: Choose one Power Utility in the meters tree at left, and input the query conditions: Meter No, Meter Type, and Status. Click "Query" button, and the system will show the query result in the meter management list according to the query condition. The meter query interface is shown as below.

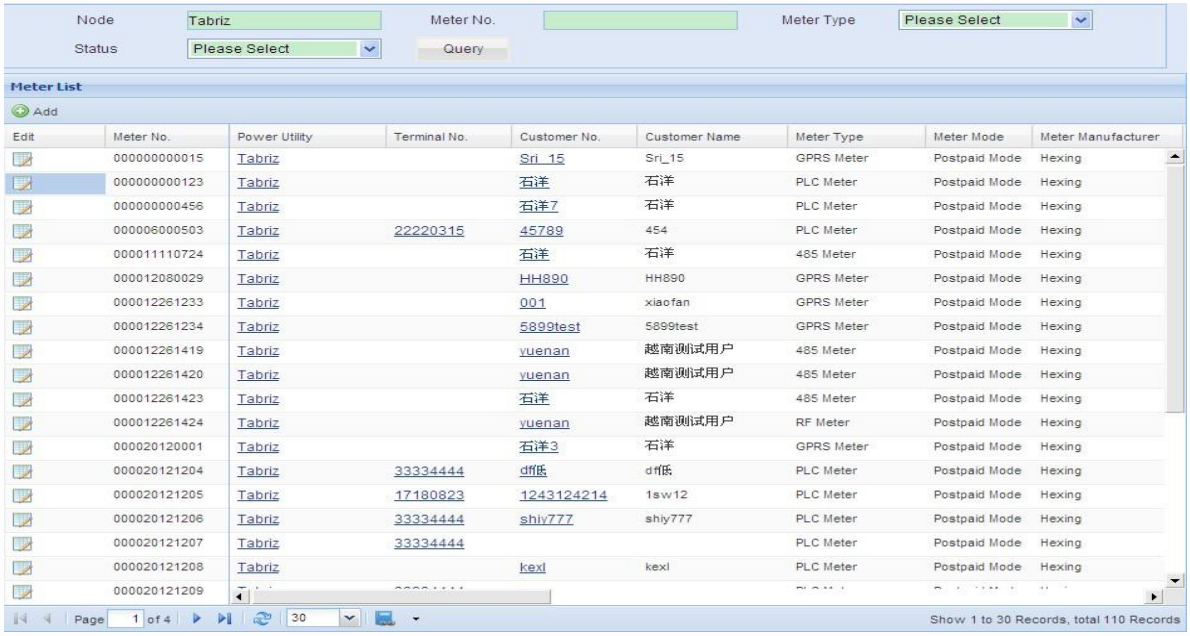

Node
Tabriz
Meter No.
Meter Type
Please Select
Status
Please Select
Query
Meter List
Add
Edit
Meter No.
Power Utility
Terminal No.
Customer No.
Customer Name
Meter Type
Meter Mode
Meter Manufacturer
000000000015 Tabriz Sri_15 Sri_15 GPRS Meter Postpaid Mode Hexing
000000000123 Tabriz 石洋 石洋 PLC Meter Postpaid Mode Hexing
000000000456 Tabriz 石洋7 石洋 PLC Meter Postpaid Mode Hexing
000006000503 Tabriz 22220315 45789 454 PLC Meter Postpaid Mode Hexing
000011110724 Tabriz 石洋 石洋 485 Meter Postpaid Mode Hexing
000012080029 Tabriz HH890 HH890 GPRS Meter Postpaid Mode Hexing
000012261233 Tabriz 001 xiaofan GPRS Meter Postpaid Mode Hexing
000012261234 Tabriz 5899test 5899test GPRS Meter Postpaid Mode Hexing
000012261419 Tabriz yuenan 越南测试用户 485 Meter Postpaid Mode Hexing
000012261420 Tabriz yuenan 越南测试用户 485 Meter Postpaid Mode Hexing
000012261423 Tabriz 石洋 石洋 485 Meter Postpaid Mode Hexing
000012261424 Tabriz yuenan 越南测试用户 RF Meter Postpaid Mode Hexing
000020120001 Tabriz 石洋3 石洋 GPRS Meter Postpaid Mode Hexing
000020121204 Tabriz 33334444 dff低 dff低 PLC Meter Postpaid Mode Hexing
000020121205 Tabriz 17180823 1243124214 1sw12 PLC Meter Postpaid Mode Hexing
000020121206 Tabriz 33334444 shiy777 shiy777 PLC Meter Postpaid Mode Hexing
000020121207 Tabriz 33334444 PLC Meter Postpaid Mode Hexing
000020121208 Tabriz kexl kexl PLC Meter Postpaid Mode Hexing
000020121209
Page 1 of 4
30
Show 1 to 30 Records, total 110 Records

Figure 46 Query Meter Information

Install Water Meter: Find out the meter for which water meter needs to be installed in the meter management list. Click "Install Water Meter" button in the operating bar to enter the interface of installation water meter. Click "Install" button to enter the window of installation water meter. Check the water meter according to the Water Meter No.,

Meter Status, and Meter Type. Choose the water meter, input Communication Port, and click “Install” button to complete the process. The installation interface is shown as below.

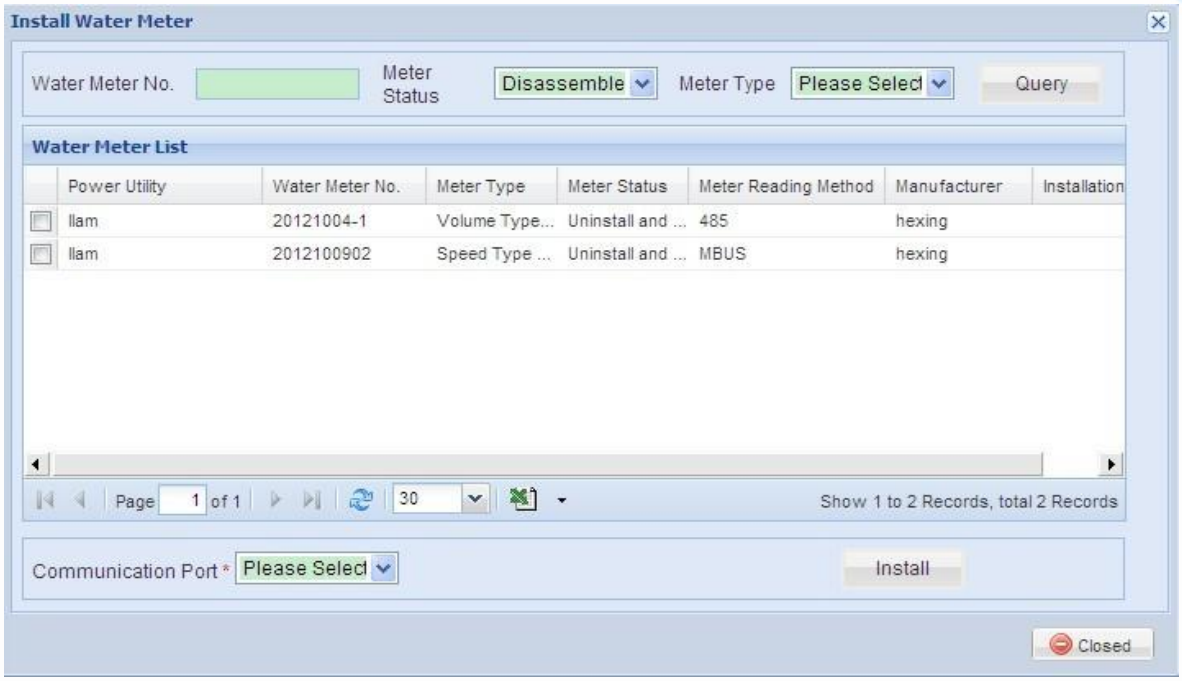


Figure 47 Install Water Meter

Note!

Only one water meter can be installed for one meter.

Modify Water Meter: Find out the water meter which needs to be modified in the water meter installation list. Click “Edit” button in operating bar to enter the water meter editing interface. Modify water meter information, and click” Save” button to complete the modification. The modifying interface is as shown below.

Figure 48 Modify Water meter

Disassemble Water Meter: Find out the water meter which needs to be disassembled in the water meter management list. Click “Disassembled” in the operating

bar. Click "OK" in the pop-up window to complete the disassembling of water meter.

Install Gas Meter: Find out the meter for which gas meter needs to be installed in the meter management list. Click "Install Gas Meter" button in the operating bar to enter the interface of installation gas meter. Click "Install" button to enter the window of installation gas meter. Check the gas meter according to the Gas Meter No., Meter Status, and Meter Type. Choose the gas meter, input Communication Port, and click "Install" button to complete the process. The installation interface is shown as below.

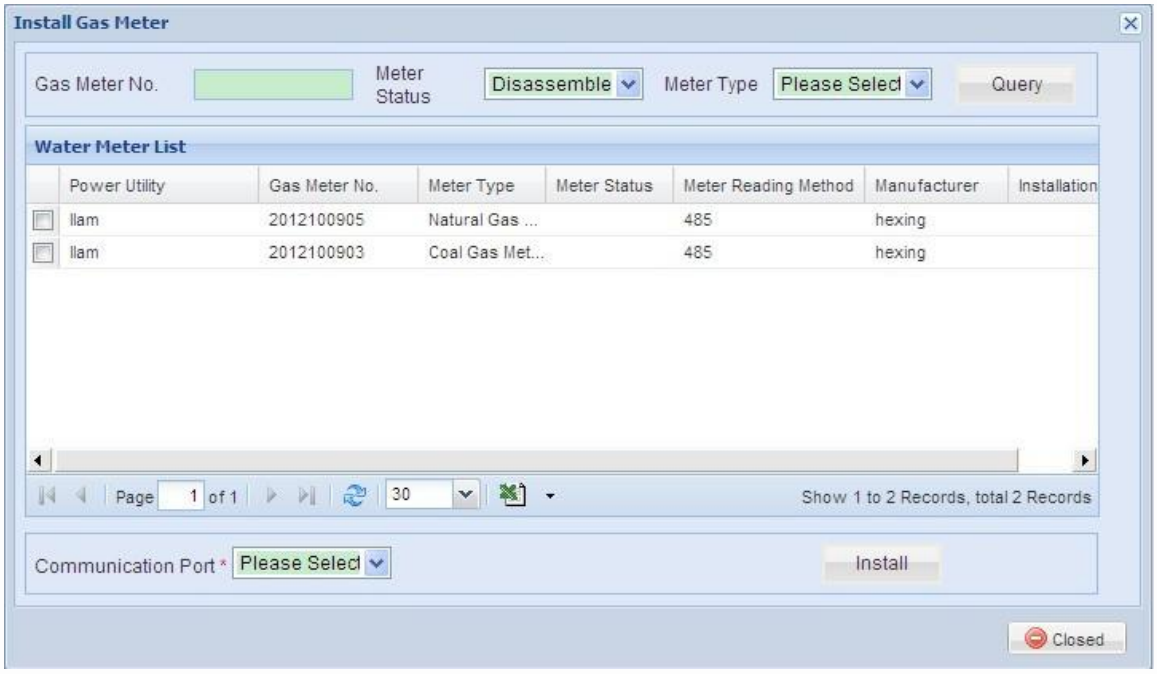


Figure 49 Install Gas Meter

Note!

Only one gas meter can be installed for one meter.

Modify Gas Meter: Find out the gas meter which needs to be modified in the gas meter installation list. Click "Edit" button in operating bar to enter the gas meter editing interface. Modify gas meter information, and click" Save" button to complete the modification. The modifying interface is as shown below.

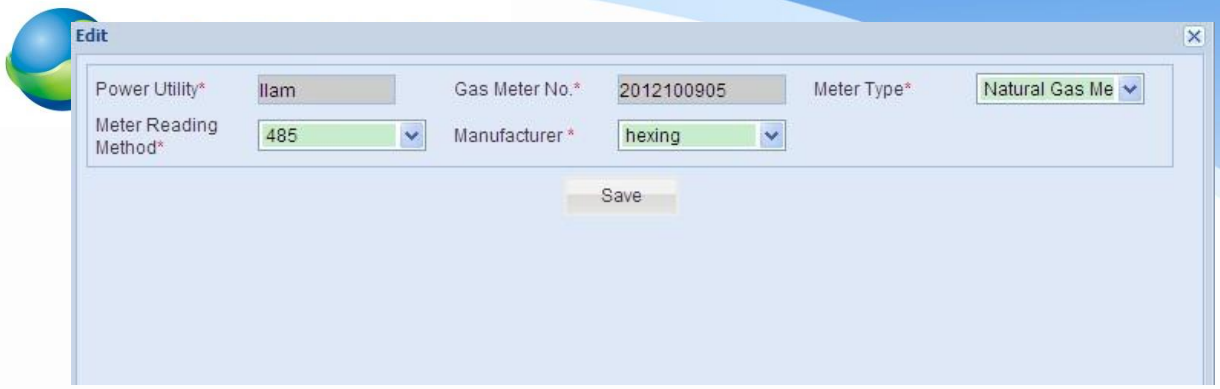


Figure 50 Modify Gas Meter

Disassemble Gas Meter: Find out the gas meter which needs to be disassembled in the gas meter management list. Click “Disassembled” in the operating bar. Click “OK” in the pop-up window to complete the disassembling of gas meter.

4.4. Customer Management

[Menu] Basic > Archives Management > Customer Management

[Function] Management of all customers in the system

[Step]

Add New Customer: In the customer management list, click “Add” button to enter the Create New Customer page. Fill in Customer No., Customer Name, Power Utility and other information. Those items marked with “*” are mandatory, the rest are optional. Click “Save” button to complete the adding of new customer. The Create New Customer interface is shown as below.

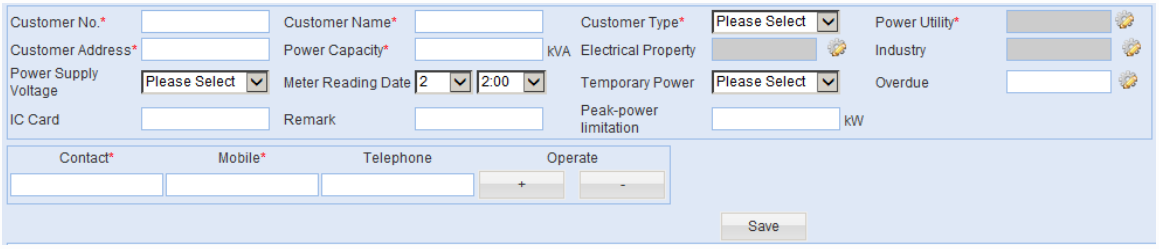


Figure 51 New customer information

Customer Logoff: Find out the customers which need to logoff in the customer management list. Click “Logoff” button in the operating bar, and click “OK” button in pop-up window to complete the logoff of customer.

Delete Customer: Find out the customer who needs to be deleted in the customer management list. Click “Delete” button in the operating bar, and click “OK” button in pop-up window to complete the deleting of customer.

Re-open: Find out the customers who need to be re-opened in the customer management list. Click “Subscribe Re-open” button in the operating bar, and click “OK” button in pop-up window to complete the reissuance of customer account.

Modify Customer: Find out the customer which needs to be modified in the customer management list. Click “Edit” button in the operating bar to enter the customer edit window. Modify the customer’s property. Click “Save” Button to complete the modification. The modification interface is as shown below.

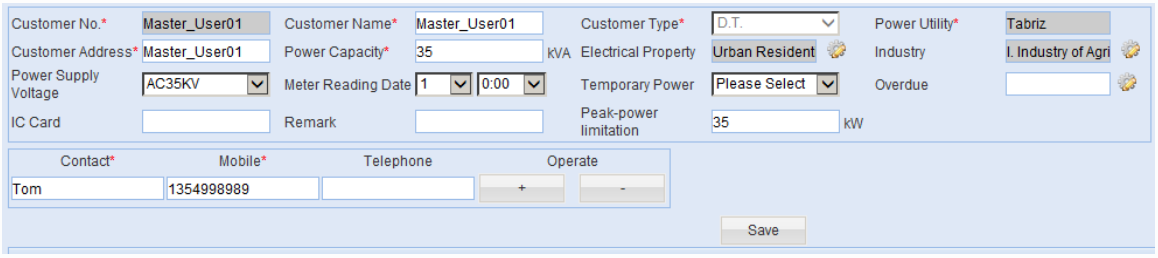


Figure 52 Edit Customer’s Information

Print Receipt for reissuance of customer account: Find out the customer who needs to print the account reissuance receipt in the customer management list. Click “Print Customer Info” button to open the interface for receipt details. Click “Print” button to print the receipt. The interface of customer information receipt is as shown below:

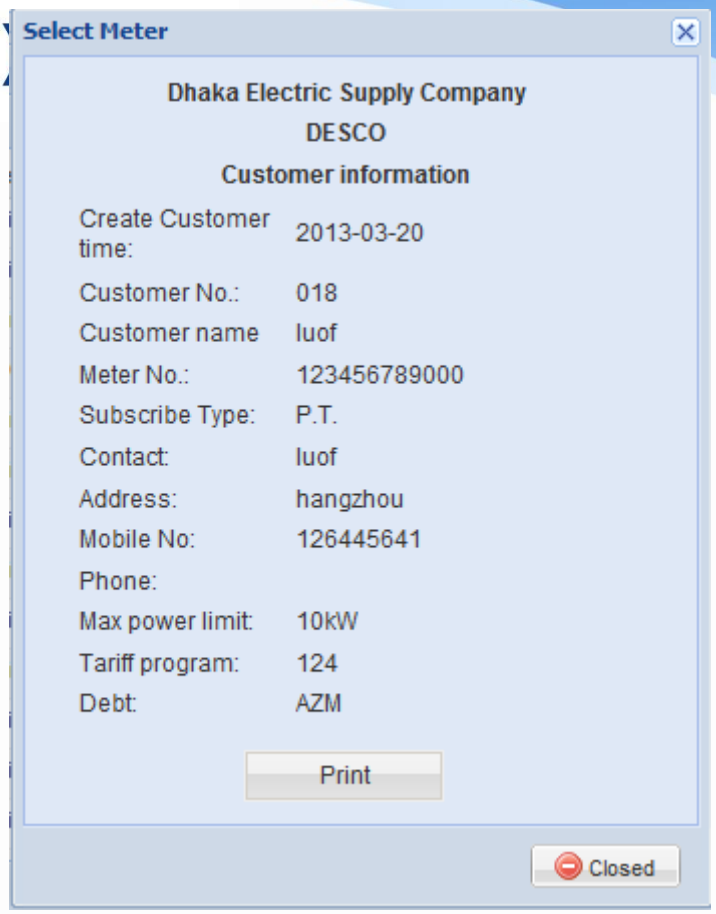


Figure 53 Customer Information Receipt

Issue Customer Card: Find out the customers who need to issue card in the customer management list. Click “Open Card” in the operating bar to open the window. Choose the meter, and click “Open Card” button to issue the card. The Issue Card interface is as shown below.

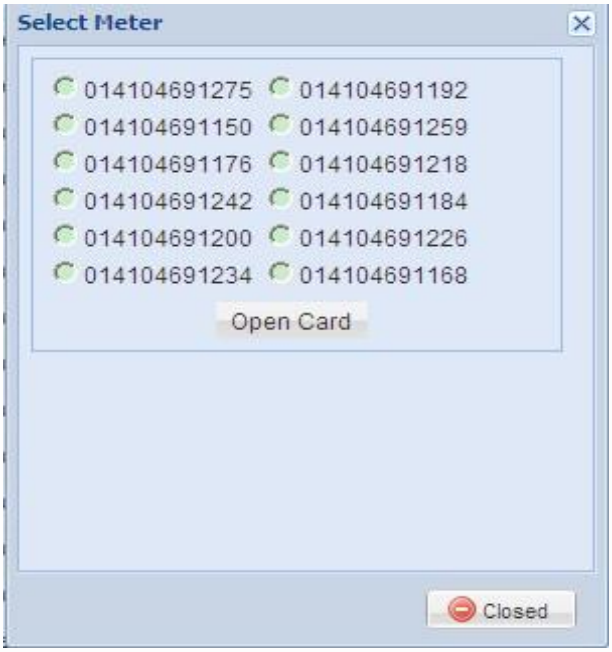


Figure 54 Issue card interface

Query Customer: Choose one Power Utility in the meter tree at left. Input the query condition like “Customer No., Status, and Customer Type” and click “Query” button. Then the system will show the result in the customer management list according to the query condition. The query interface is as follows:

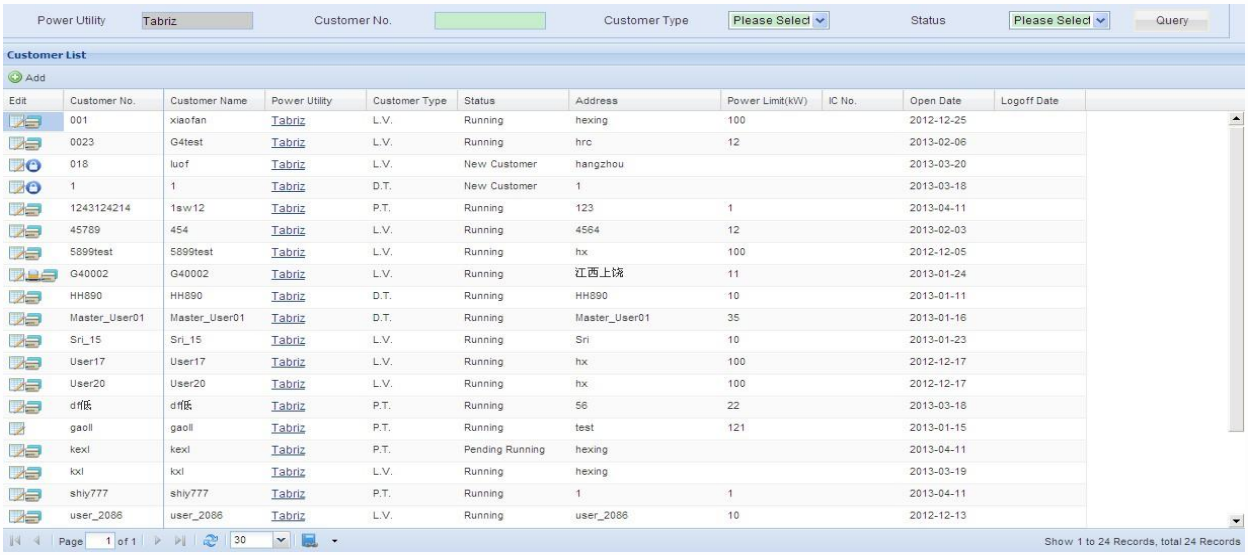

Power Utility
Tabriz
Customer No.
Customer Type
Please Select
Status
Please Select
Query
Customer List
Add
Edit
Customer No.
Customer Name
Power Utility
Customer Type
Status
Address
Power Limit(kW)
IC No.
Open Date
Logoff Date
001 xiaofan Tabriz L.V. Running hexing 100 2012-12-25
0023 G4test Tabriz L.V. Running hrc 12 2013-02-06
018 luof Tabriz L.V. New Customer hangzhou 2013-03-20
1 1 Tabriz D.T. New Customer 1 2013-03-18
1243124214 1sw12 Tabriz P.T. Running 123 1 2013-04-11
45789 454 Tabriz L.V. Running 4564 12 2013-02-03
5899test 5899test Tabriz L.V. Running hx 100 2012-12-05
G40002 G40002 Tabriz L.V. Running 江西上饶 11 2013-01-24
HH890 HH890 Tabriz D.T. Running HH890 10 2013-01-11
Master_User01 Master_User01 Tabriz D.T. Running Master_User01 35 2013-01-16
Sri_15 Sri_15 Tabriz L.V. Running Sri 10 2013-01-23
User17 User17 Tabriz L.V. Running hx 100 2012-12-17
User20 User20 Tabriz L.V. Running hx 100 2012-12-17
dfl氓 dfl氓 Tabriz P.T. Running 56 22 2013-03-18
gaoll gaoll Tabriz P.T. Running test 121 2013-01-15
kexl kexl Tabriz P.T. Pending Running hexing 2013-04-11
kxl kxl Tabriz L.V. Running hexing 2013-03-19
shiy777 shiy777 Tabriz P.T. Running 1 1 2013-04-11
user_2086 user_2086 Tabriz L.V. Running user_2086 10 2012-12-13
Page 1 of 1
30
Show 1 to 24 Records, total 24 Records

Figure 55 Query Customer Information

Install Meter for the customer: Click “Install Meter” button in the meter management list to enter the installation window. Query the meter according to “Meter No., Status, and Meter Type”. Choose the meter and “Transformer, Branch Line”, and then click” Install” to associate meter with the customer. The interface is as follows:

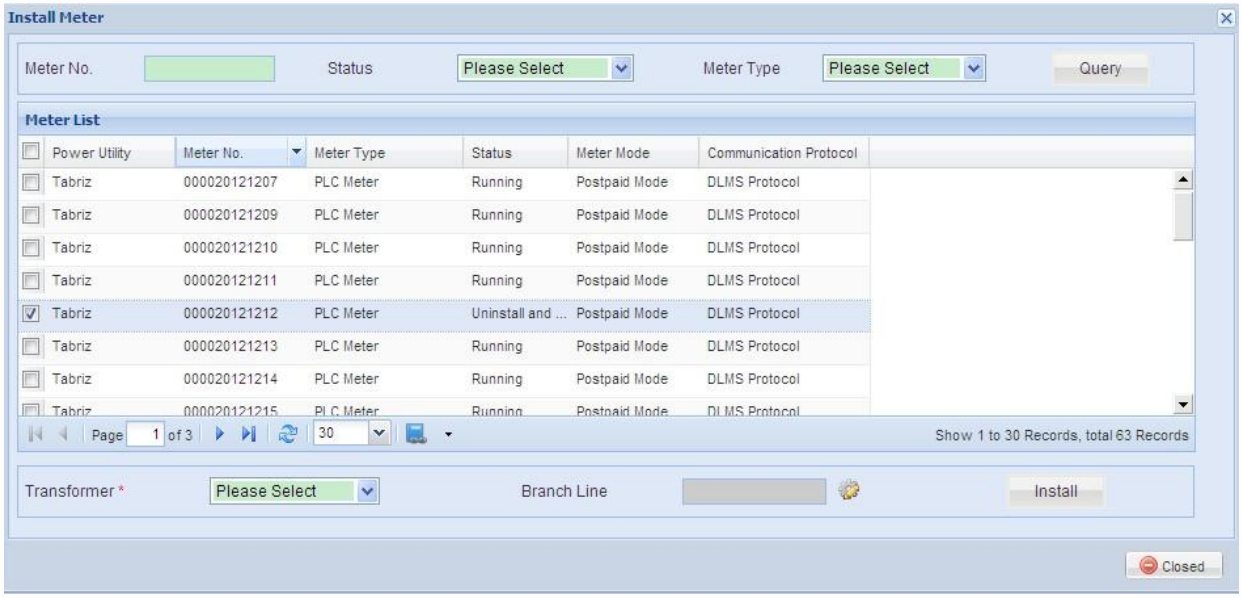


Figure 56 Install Meter

Note!

For Power plan users, only the meters for power plant can be installed. For users other than Power plant user, all the rest meter types can be installed.

Disassemble the meter: Find out the meter that needs to be disassembled in the meter management list. Click “Remove and Take Bac” button in the operating bar, and click “OK” button in the pop-up window to complete disassembling of the meter.

Modify meter: Find out the meter that needs to be modified in the meter management list. Click “Edit” button in the operating bar to enter edit window. Modify the meter’s property. Click “Save” button to complete the modification. The modification interface is as follows:

Figure 57 Edit Meter Information

4.5. Data Collector Management

[Menu] Basic > Archives Management > Collector Management

[Function] Management of All the Data Collectors in the System

[Step]

Add New Collector: In the collectors management list, click “Add” button to enter the Create New Collector page. Fill in Collector No., Power Utility and other information. Those items marked with “*” are mandatory, the rest are optional. Click “Save” button to complete the adding of new collector. The Create New Collector

interface is shown as below.

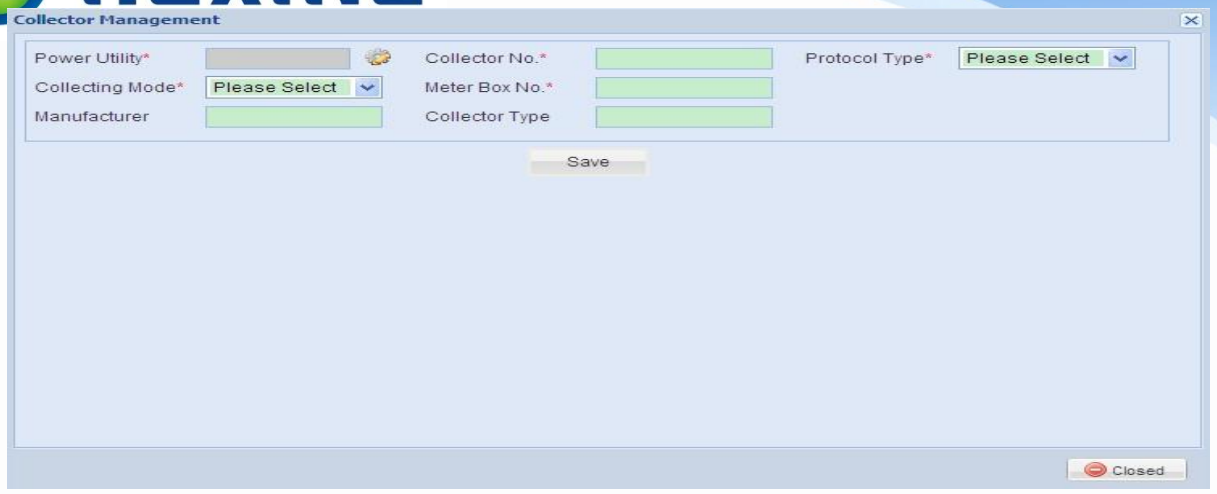


Figure 58 Add New Collector

Delete: Find out the collector that needs to be deleted in the collector management list. Click “Delete” button in the operating list. Click “OK” button in the pop-up window to complete the deleting of collector.

Disassemble: Find out the collector that needs to be disassembled in the collector management list. Click “Remove and Take Back” button in the operating bar. Click “OK” button in pop-up window to complete disassembling of collector.

Modify: Find out the collector that needs to be modified in the collector management list. Click “Edit” button to enter collector edit window. Modify the property of collector, and click “Save” button to complete the modification. The modification interface is as follows:

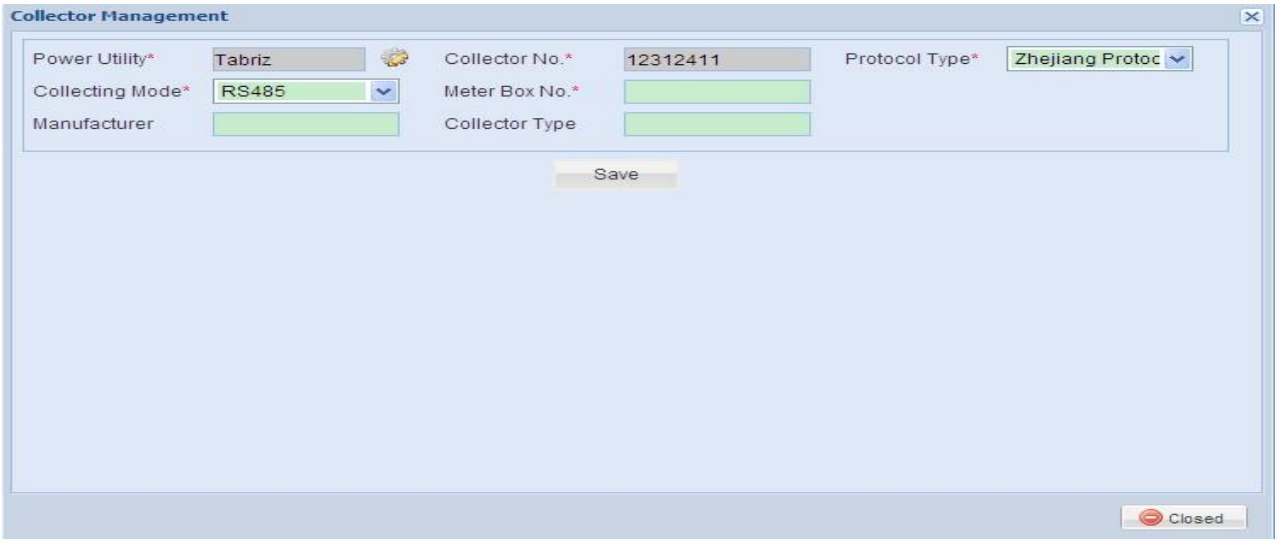


Figure 59 Edit Collector

Query: Choose one Power Utility in the meter tree. Input “Collector No, Status, Meter Box No”, and click “Query” button. The system will show the result in the collector management list according to the query condition. The query interface is as follows:

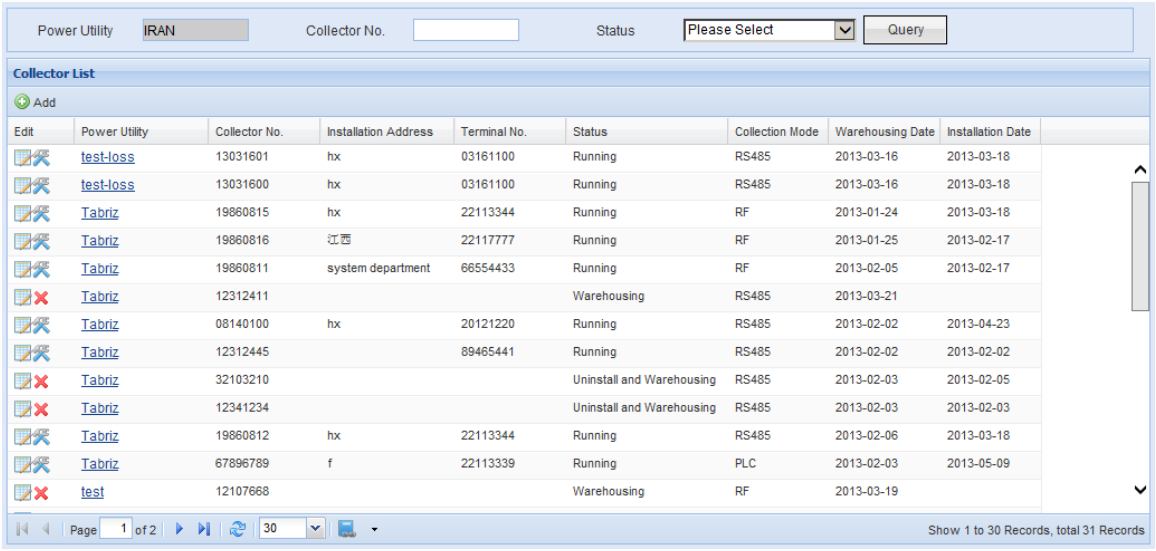

Power Utility
IRAN
Collector No.
Status
Please Select
Query
Collector List
Add
Edit
Power Utility
Collector No.
Installation Address
Terminal No.
Status
Collection Mode
Warehousing Date
Installation Date
test-loss 13031601 hx 03161100 Running RS485 2013-03-16 2013-03-18
test-loss 13031600 hx 03161100 Running RS485 2013-03-16 2013-03-18
Tabriz 19860815 hx 22113344 Running RF 2013-01-24 2013-03-18
Tabriz 19860816 22117777 Running RF 2013-01-25 2013-02-17
Tabriz 19860811 system department 66554433 Running RF 2013-02-05 2013-02-17
Tabriz 12312411 Warehousing RS485 2013-03-21
Tabriz 08140100 hx 20121220 Running RS485 2013-02-02 2013-04-23
Tabriz 12312445 89465441 Running RS485 2013-02-02 2013-02-02
Tabriz 32103210 Uninstall and Warehousing RS485 2013-02-03 2013-02-05
Tabriz 12341234 Uninstall and Warehousing RS485 2013-02-03 2013-02-03
Tabriz 19860812 hx 22113344 Running RS485 2013-02-06 2013-03-18
Tabriz 67896789 f 22113339 Running PLC 2013-02-03 2013-05-09
test 12107668 Warehousing RF 2013-03-19
Page 1 of 2
30
Show 1 to 30 Records, total 31 Records

Figure 60 Query Collector

4.6. Terminal Management

[Menu] Basic > Archives Management >Terminal Management

[Function] Management of all the terminals in the system

[Step]

Add New Terminal: In the terminal management list, click “Add” button to enter the Create New Terminal page. Fill in Terminal No., Power Utility, Terminal Type and other information. Those items marked with “*” are mandatory, the rest are optional. Click “Save” button to complete the adding of new terminal. The Create New Terminal interface is shown as below.

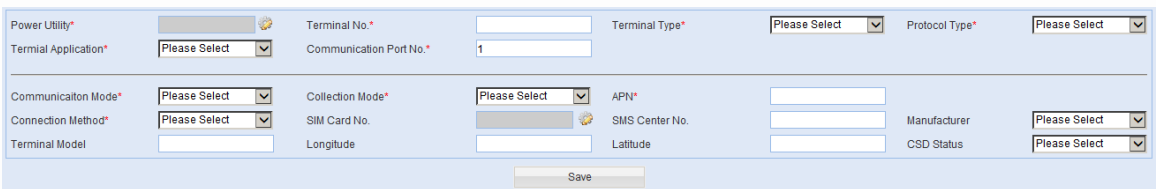


Figure 61 Added New Terminal

Note!

For the terminals for public transformers, only the network meters can be chosen.

Delete: Find out the terminal that needs to be deleted in the terminal management list. Click “Delete” button in the operating list. Click “OK” button in the pop-up window to complete the deleting of terminal.

Disassemble: Find out the terminal that needs to be disassembled in the terminal management list. Click “Remove and Take Back” button in the operating bar. Click “OK” button in pop-up window to complete disassembling of terminal.

Modify: Find out the terminal that needs to be modified in the terminal management list. Click “Edit” button to enter terminal edit window. Modify the property of terminal, and click “Save” button to complete the modification. The modification interface is as follows:

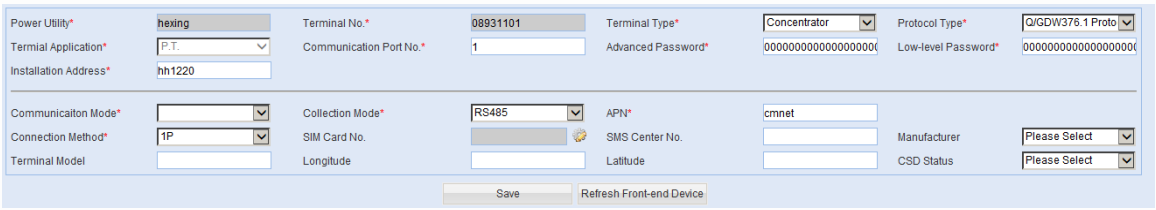


Figure 62 Edit Terminal

Refresh Front-End Machine: Click “Refresh Front-end Device” button in the terminal edit page.

Query: Choose one Power Utility in the meter tree. Input “Terminal No., Status, Terminal Type, Terminal Application”, and click “Query” button. The system will show the result in the terminal management list according to the query condition. The query interface is as follows:

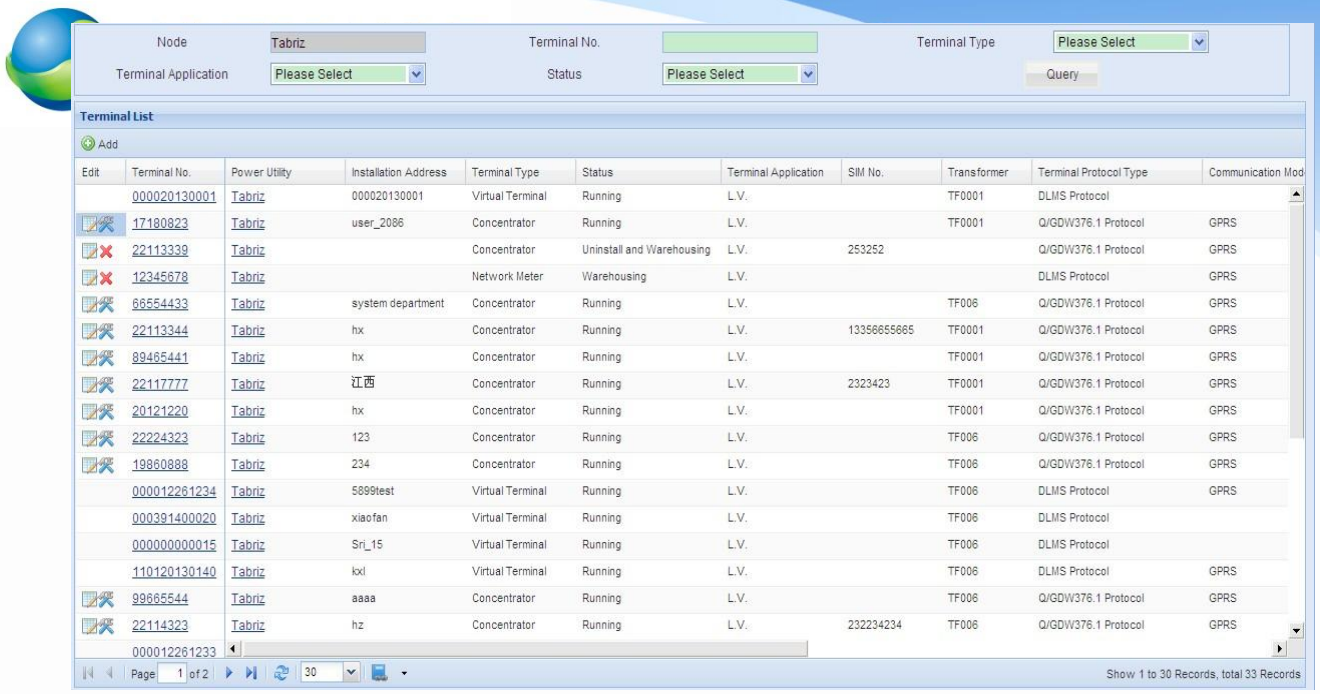

Node
Tabriz
Terminal No.
Terminal Type
Please Select
Terminal Application
Please Select
Status
Please Select
Query
Terminal List
Add
Edit
Terminal No.
Power Utility
Installation Address
Terminal Type
Status
Terminal Application
SIM No.
Transformer
Terminal Protocol Type
Communication Mod
000020130001 Tabriz 000020130001 Virtual Terminal Running L.V. TF0001 DLMS Protocol
17180823 Tabriz user_2086 Concentrator Running L.V. TF0001 Q/GDW376.1 Protocol GPRS
22113339 Tabriz Concentrator Uninstall and Warehousing L.V. 253252 Q/GDW376.1 Protocol GPRS
12345678 Tabriz Network Meter Warehousing L.V. DLMS Protocol GPRS
66554433 Tabriz system department Concentrator Running L.V. TF006 Q/GDW376.1 Protocol GPRS
22113344 Tabriz hx Concentrator Running L.V. 13356655665 TF0001 Q/GDW376.1 Protocol GPRS
89465441 Tabriz hx Concentrator Running L.V. TF0001 Q/GDW376.1 Protocol GPRS
22117777 Tabriz 江西 Concentrator Running L.V. 2323423 TF0001 Q/GDW376.1 Protocol GPRS
20121220 Tabriz hx Concentrator Running L.V. TF0001 Q/GDW376.1 Protocol GPRS
22224323 Tabriz 123 Concentrator Running L.V. TF006 Q/GDW376.1 Protocol GPRS
19860888 Tabriz 234 Concentrator Running L.V. TF006 Q/GDW376.1 Protocol GPRS
000012261234 Tabriz 5899test Virtual Terminal Running L.V. TF006 DLMS Protocol GPRS
000391400020 Tabriz xiaofan Virtual Terminal Running L.V. TF006 DLMS Protocol
000000000015 Tabriz Sri_15 Virtual Terminal Running L.V. TF006 DLMS Protocol
110120130140 Tabriz lxl Virtual Terminal Running L.V. TF006 DLMS Protocol GPRS
99665544 Tabriz aaaa Concentrator Running L.V. TF006 Q/GDW376.1 Protocol GPRS
22114323 Tabriz hz Concentrator Running L.V. 232234234 TF006 Q/GDW376.1 Protocol GPRS
000012261233
Page 1 of 2
30
Show 1 to 30 Records, total 33 Records

Figure 63 Query Terminal

4.7. SIM Card Management

[Menu] Basic > Archives Management > SIM Card Management

[Function] Management of all the SIM Cards in the System

[Step]

Add New SIM Card: In the SIM card management list, click “Add” button to enter the Create New SIM Card page. Fill in “Power Utility, SIM No., SIM Serial Number, Service providers, Edge Type” and “Status”. Click “Save” button to complete the adding of new SIM card.

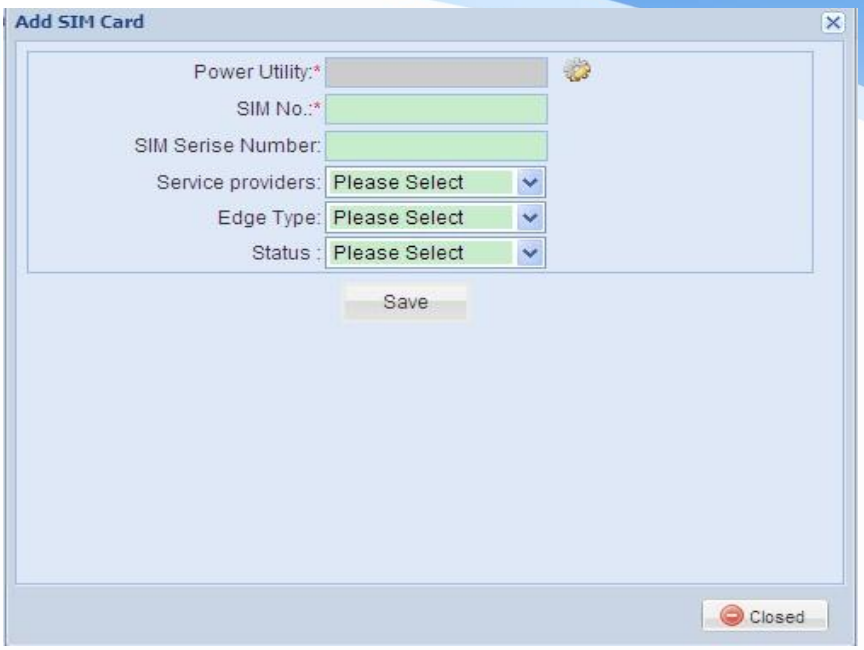


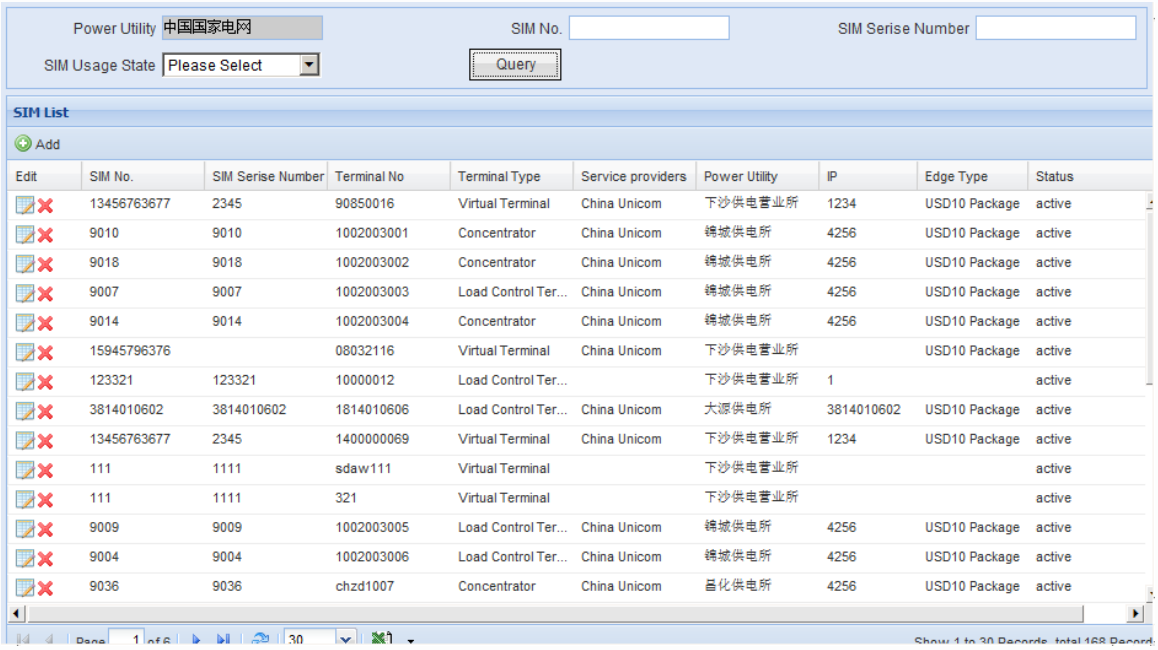
Figure 64 Add New SIM Card

Delete: Find out the SIM card that needs to be deleted in the SIM card management list. Click “Delete” button in the operating list. Click “OK” button in the pop-up window to complete the deleting of SIM card.

Modify: Find out the SIM card that needs to be modified in the SIM card management list. Click “Edit” button to enter SIM card edit window. Modify the property of SIM card, and click “Save” button to complete the modification. The modification interface is as follows:

Figure 65 Edit SIM Card

Query: Choose one Power Utility in the meter tree. Input “SIM No., SIM Serial Number, SIM Usage State”, and click “Query” button. The system will show the result in the SIM card management list according to the query condition.



Edit	SIM No.	SIM Serise Number	Terminal No	Terminal Type	Service providers	Power Utility	IP	Edge Type	Status
	13456763677	2345	90850016	Virtual Terminal	China Unicom	下沙供电营业所	1234	USD10 Package	active
	9010	9010	1002003001	Concentrator	China Unicom	锦城供电所	4256	USD10 Package	active
	9018	9018	1002003002	Concentrator	China Unicom	锦城供电所	4256	USD10 Package	active
	9007	9007	1002003003	Load Control Ter...	China Unicom	锦城供电所	4256	USD10 Package	active
	9014	9014	1002003004	Concentrator	China Unicom	锦城供电所	4256	USD10 Package	active
	15945796376		08032116	Virtual Terminal	China Unicom	下沙供电营业所		USD10 Package	active
	123321	123321	10000012	Load Control Ter...		下沙供电营业所	1		active
	3814010602	3814010602	1814010606	Load Control Ter...	China Unicom	大源供电所	3814010602	USD10 Package	active
	13456763677	2345	1400000069	Virtual Terminal	China Unicom	下沙供电营业所	1234	USD10 Package	active
	111	1111	sdaw111	Virtual Terminal		下沙供电营业所			active
	111	1111	321	Virtual Terminal		下沙供电营业所			active
	9009	9009	1002003005	Load Control Ter...	China Unicom	锦城供电所	4256	USD10 Package	active
	9004	9004	1002003006	Load Control Ter...	China Unicom	锦城供电所	4256	USD10 Package	active
	9036	9036	chzd1007	Concentrator	China Unicom	昌化供电所	4256	USD10 Package	active

Figure 66 Query SIM Card

Note!

The SIM may have two status: active and inactive. Only the active SIM card can be used. Once the SIM card is created, the SIM card number can not be modified.

4.8. Archives Import

[Menu] Basic > Archives Management > Archives Import

[Function] Batch Import of Archives

[Step]

The system provides the function of batch importing the archives in Excel files to the system. Below archive files can be imported in batches: Feeder Line Archives, Transformer Area Archives, Transformer Archives, GPRS Meter, RS485/PLC Meter, Customer Archives and Terminal Archives .etc. The system provides template file for each type of archive file. Users can download the template file to local, and fill in the archive information according to the format specified in the template files. After that,

click "Browse" button and choose the files to be imported. Click "Import" button to finish the batch import of actives information. Click "Reset" button to clear all the addresses of the imported files.

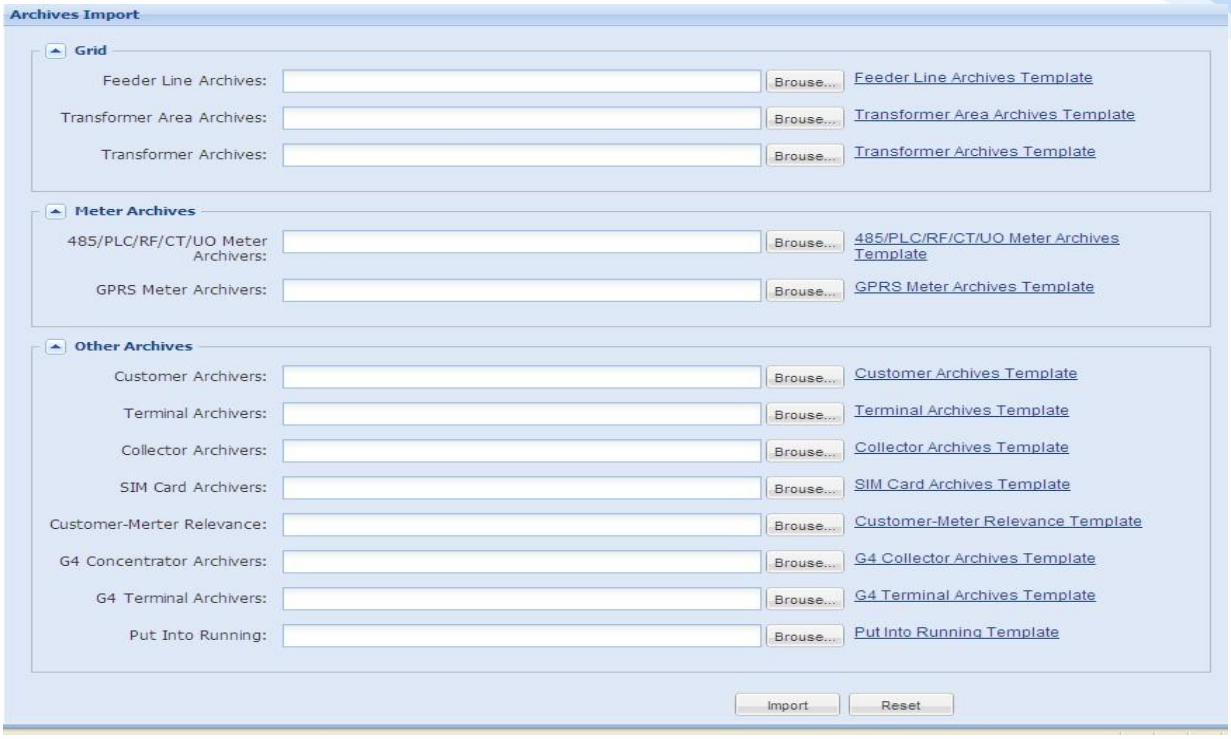


Figure 67 Import Archives

Note!

The format of imported file is Excel; when filling in archive information in the excel file, the input information format must comply with the data format defined in the template file.

For "Power Utility" in all the Template files, the input Class must be 06 DWDM if there is no special requirement.

The input content: one Chinese character (3 bytes), one number (1 byte), one English letter (1 byte).

Restrictive conditions of each template file are as follows:

Template File Name	Restrictive Conditions
Feeder Line	Feeder Line No.: length ≤20 bytes
Transformer Area	The input value of Feeder Line ID can be queried in the grid management line query list under the basis application of AMI system. Transformer Area No: length ≤20 bytes

Transformer	The input value of Transformer Area ID can be queried in the grid management transformer area query list under the basis application of AMI system. Nameplate Capacity: only positive integer less than 16bytes can be input here. Device Type: length ≤8 bytes.
RS485/PLC/RF/CT/UO Meter	Meter No.: length must be the 12 bytes digits ct,pt: must be the digit Connection Method: when choose “01”, you must fill in “1” at “CT, PT”. Communication Port: length ≤ 4bytes Longitude and Latitude: must be digit, the integer is less than 3 bytes, and the decimal is less than 10 bytes. Absolute value of Longitude ≤180; Absolute value of Latitude ≤90. Meter Bar Code: length ≤32 bytes Meter Type length ≤ 8 bytes Pulse Constant length ≤ 16 bytes
GPRS Meter	Meter No.: when Protocol Type is 03, the length of Meter No. must be 12 bytes, when Protocol Type is others; the length must be 8 bytes. ct,pt: must be the digit Connection Method: when choose “01”, you must fill in “1” at “CT, PT”. Communication Port: length ≤4 bytes Longitude and Latitude: must be digit, the integer is less than 3 bytes, and the decimal is less than 10 bytes. Absolute value of Longitude ≤180; Absolute value of Latitude ≤90. Meter Bar Code: length ≤32 bytes Meter Type length ≤ 8 bytes Pulse Constant length ≤ 16 bytes When Meter Protocol is “03”, Protocol Type can only choose”03”;

	When Meter Protocol is “01,02”,Protocol Type can only choose “01”or “02”; APN length: ≤20 bytes SMS Center Number length: ≤16 bytes
Prepaid Offline Meter	Length of Meter No. must be 12 bytes Length of Meter Bar Code ≤32 bytes Length of Meter Type ≤8 bytes Length of Pulse Constant ≤16bytes
Water Meter	Length of Water Meter No.≤32 bytes
Gas Meter	Length of Gas Meter No.≤32 bytes
Customer	Length of Customer No.≤10 bytes Power Capacity and Peak-power limitation must be the integer that is over 0. Length of IC Card ≤20 bytes Arrears must be positive number For Contact Type, Contact, Mobile phone, Telephone: only one value can be input.
Data Collector	Collector No. length ≤32 bytes Communication Address length ≤16 bytes Collector Type length ≤20 bytes Manufacturer length ≤16 bytes
SIM Card	SIM Card No. must be integer and the length ≤20 bytes Length of SIM Card Code ≤30 bytes IP length ≤20 bytes
Terminal	Terminal No., must be 8-byte digit Communication Port No., length ≤ 5 bytes APN length ≤20 bytes SMS Center No., length ≤ 20 bytes

	Terminal Type, length ≤ 20 bytes Longitude and Latitude must be digit, integer is less than 3 bytes, and the decimal is less than 10 bytes. Absolute value of Longitude ≤180; Absolute value of Latitude ≤90. When Terminal Application is “02”, Terminal Type can only be “02”.
Customer and Meter Association	Meter No is taken from Meter Management. Customer No is taken from Customer Management. Transformer is taken from Grid Management.
Terminal is put into running	Terminal No. is taken from Terminal Management. Transformer is taken from Grid Management.

4.9. Archives Statistics

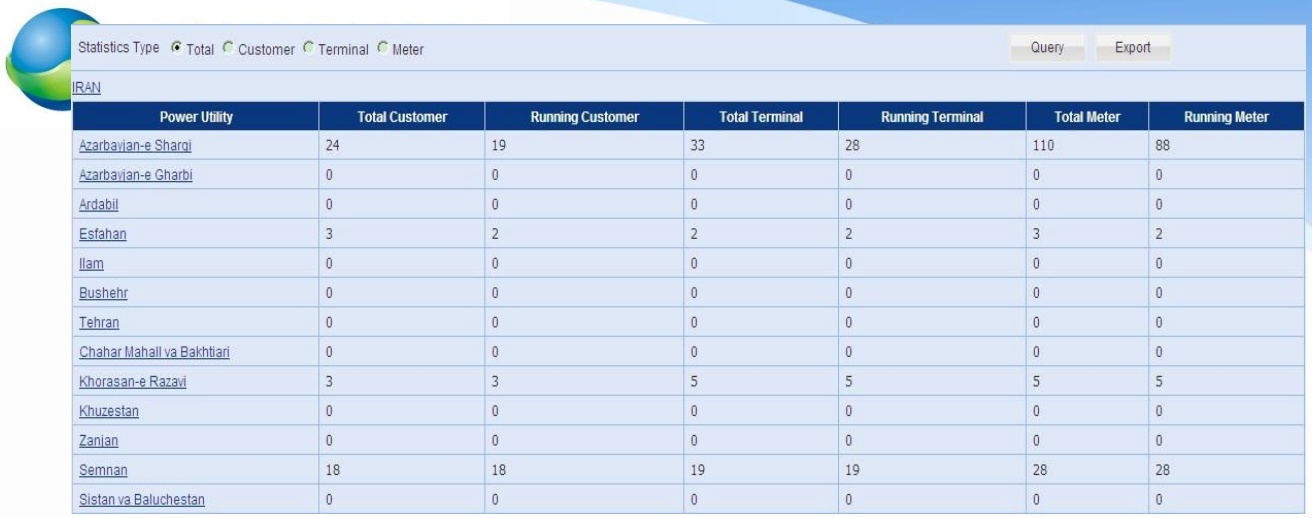
[Menu] Basic > Archives Management > Archives Statistics

[Function] Making records for total quantity of Archives, Statistics for the and Invest and Operate Quantity of

[Step]

Archives Statistics: Enter the Archives Statistics interface and choose the statistics type: Total, Customer, Terminal, and Meter. Click “Query” button and the system will count the total quantity and total number that is put into operation for different types of actives under this Power Utility. By default, the top level Power Utility in the system will be displayed. If this Power Utility contains any subsidiary, you can check the statistics information of each level subsidiary..

Export Excel file: click “Export” button, and export the actives statistics information to Excel file.



Power Utility	Total Customer	Running Customer	Total Terminal	Running Terminal	Total Meter	Running Meter
Azarbayjan-e Shargi	24	19	33	28	110	88
Azarbayjan-e Gharbi	0	0	0	0	0	0
Ardabil	0	0	0	0	0	0
Esfahan	3	2	2	2	3	2
Ilam	0	0	0	0	0	0
Bushehr	0	0	0	0	0	0
Tehran	0	0	0	0	0	0
Chahar Mahall va Bakhtiari	0	0	0	0	0	0
Khorasan-e Razavi	3	3	5	5	5	5
Khuzestan	0	0	0	0	0	0
Zanjan	0	0	0	0	0	0
Semnan	18	18	19	19	28	28
Sistan va Baluchestan	0	0	0	0	0	0

Figure 68 Archive Statistics

4.10. Water Meter Management

[Menu] Basic > Archives Management >Water Meter Management

[Function] Management of all the Water Meters in the System

[Step]

Add New Water Meter: In the water meter management list, click “Add” button to enter the Create New Water Meter page. Fill in Water Meter No, Power Utility, Meter Type and other information. Those items marked with “*”are mandatory, the rest are optional. Click “Save” button to complete the adding of new water meter. The Create New Water Meter interface is shown as below.

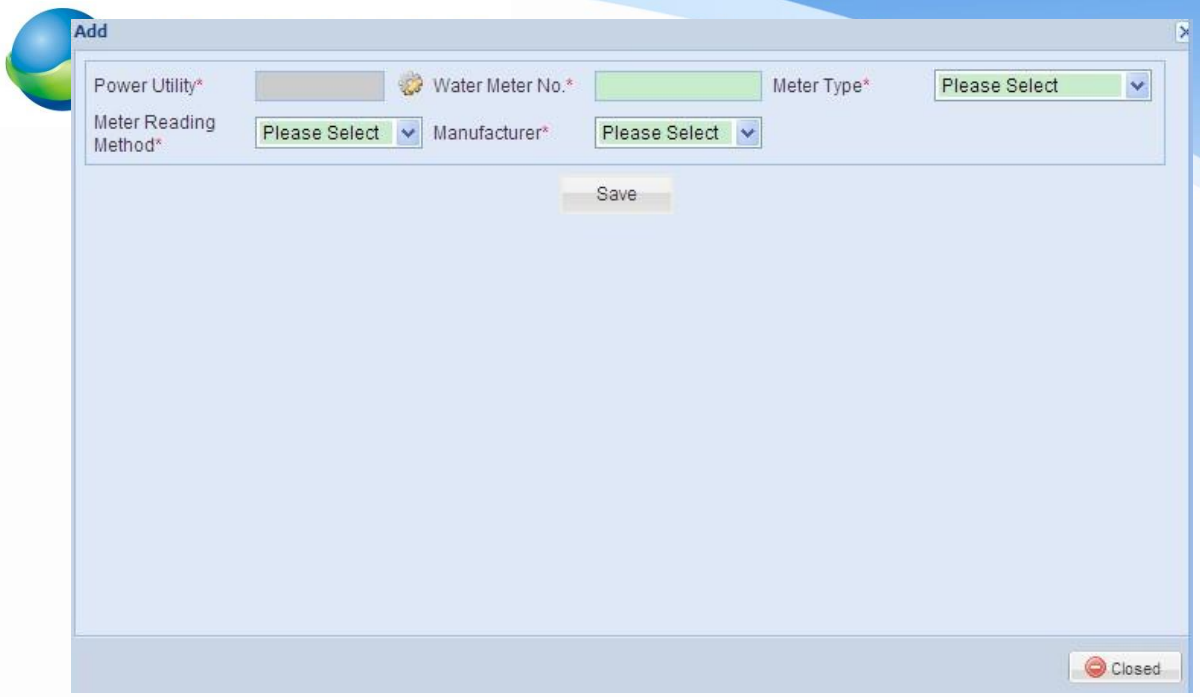


Figure 69 Add New Water Meter

Delete: Find out the water meter that needs to be deleted in the water meter management list, and click “Delete” button in the operating bar. Then click “OK” button in the pop-up window to complete the deleting of water meter.

Modify: Find out the water meter that need to be modified in the water meter management list, and click “Edit” button in the operating bar to enter the water meter editing window. Modify the property of the water meter, then click the “Save” button to complete the modification of water meter. The modifying interface is as shown below.

Figure 70 Water Meter Modification

Query: Choose one Power Utility in the meters tree at left, and input the query conditions: Water Meter No, Meter Status, and Meter Type. Click “Query” button, and the system will show the query result in the water meter management list according to the query condition. The water meter query interface is shown as below.

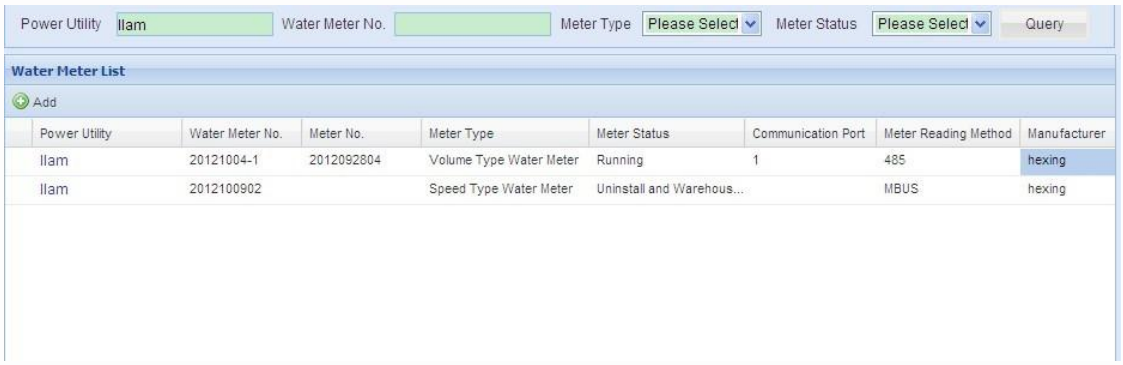


Figure 71 Water Meter Query

4.11. Gas Meter Management

[Menu] Basic > Archives Management >Gas Meter Management

[Function] Management of all the Gas Meters in the System

[Step]

Add New Gas Meter: In the gas meter management list, click “Add” button to enter the Create New Gas Meter page. Fill in Gas Meter No, Power Utility, Meter Type and other information. Those items marked with “*”are mandatory, the rest are optional. Click “Save” button to complete the adding of new gas meter. The Create New Gas Meter interface is shown as below.

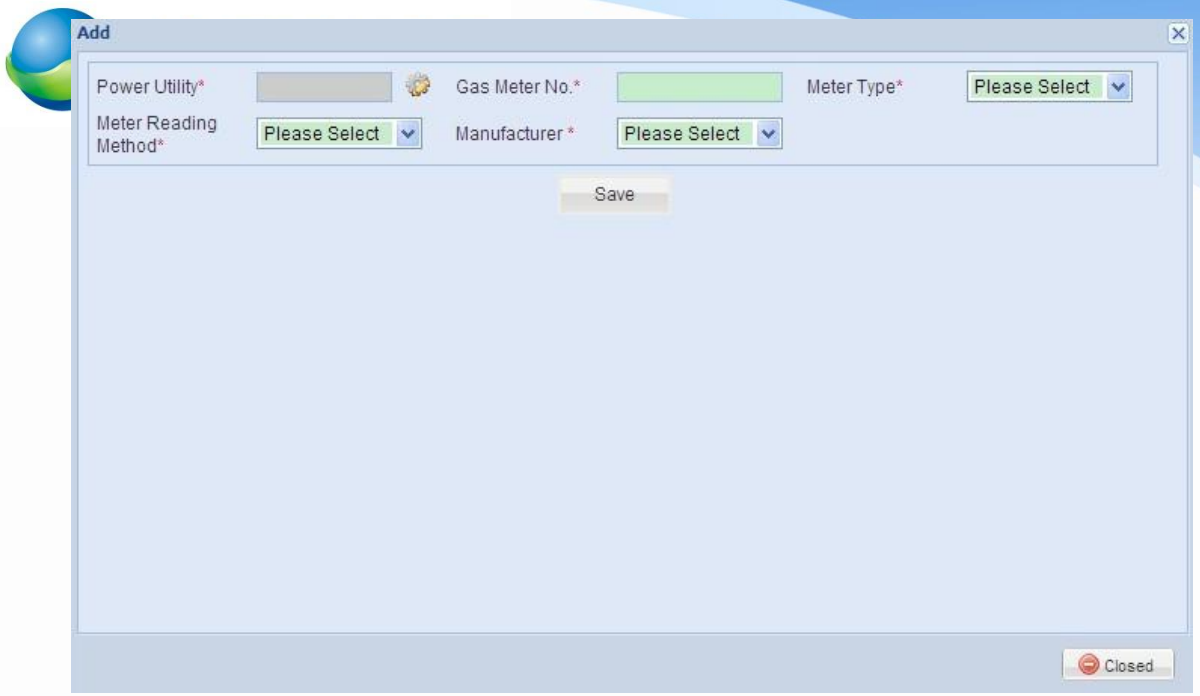


Figure 72 Add New Gas Meter

Delete: Find out the gas meter that needs to be deleted in the gas meter management list, and click “Delete” button in the operating bar. Then click “OK” button in the pop-up window to complete the deleting of gas meter.

Modify: Find out the gas meter that need to be modified in the gas meter management list, and click “Edit” button in the operating bar to enter the gas meter editing window. Modify the property of the gas meter, then click the “Save” button to complete the modification of gas meter. The modifying interface is as shown below.

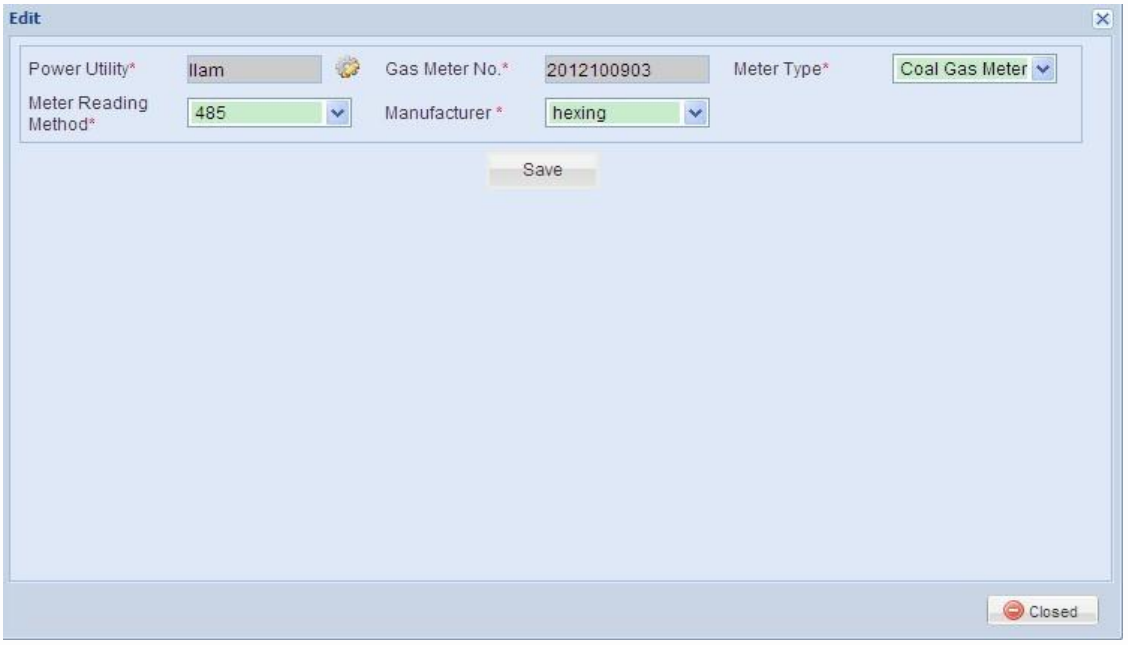


Figure 73 Gas Meter Modification

Query: Choose one Power Utility in the meters tree at left, and input the query conditions: Gas Meter No, Meter Status, and Meter Type. Click “Query” button, and the system will show the query result in the gas meter management list according to the query condition. The gas meter query interface is shown as below.

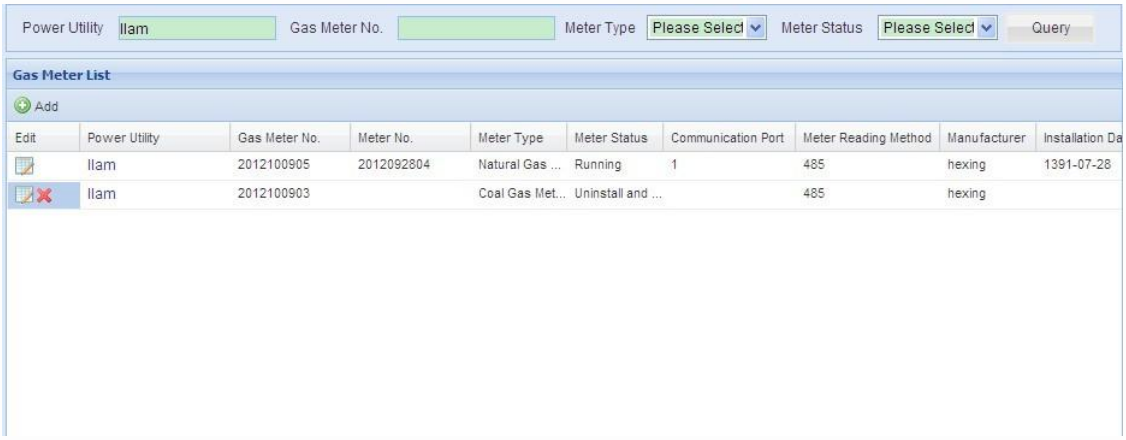


Figure 74 Gas Meter Query

4.12. Meter Type Change

[Menu] Basic > Archives Management > Meter Type Change

[Function] Change between GPRS Meter and PLC Meter

[Step]

Query: Choose one Power Utility in the meter tree at left, input the query conditions like “Meter No., Meter Protocol”, and click “Query” button. The system will show the results in the meter list. The query interface is as follows:

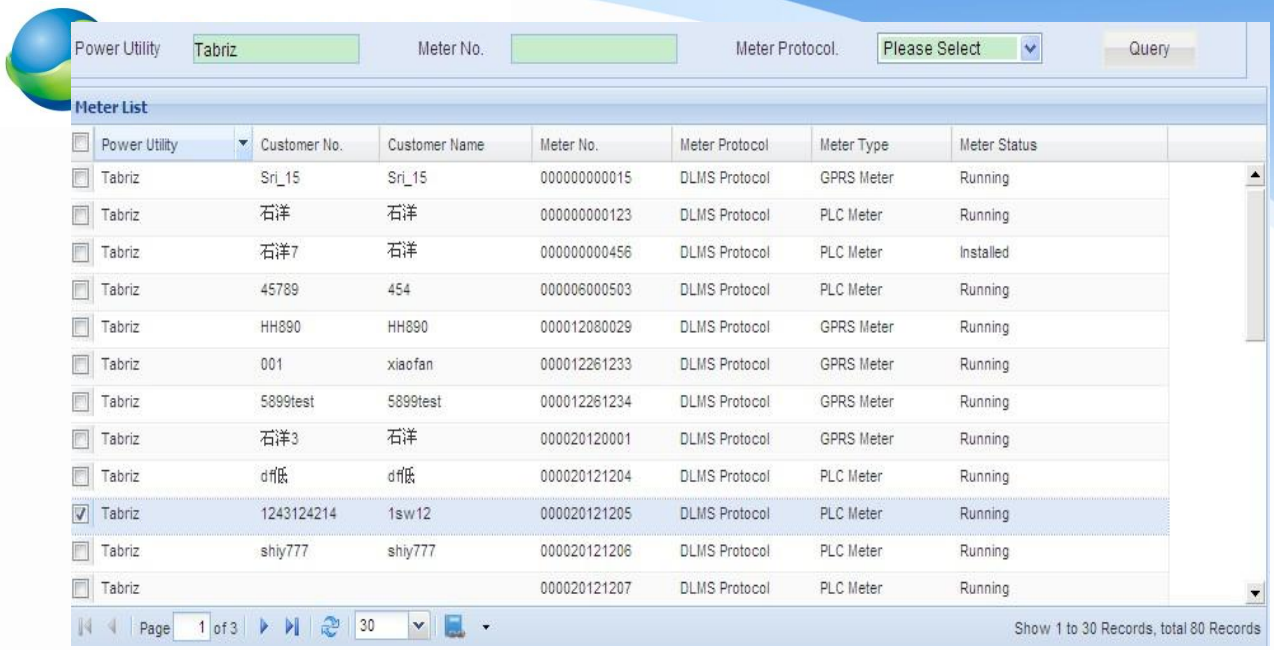

Power Utility
Tabriz
Meter No.
Meter Protocol.
Please Select
Query
Meter List
Power Utility
Customer No.
Customer Name
Meter No.
Meter Protocol
Meter Type
Meter Status
Tabriz Sri_15 Sri_15 000000000015 DLMS Protocol GPRS Meter Running
Tabriz 石洋 石洋 000000000123 DLMS Protocol PLC Meter Running
Tabriz 石洋7 石洋 000000000456 DLMS Protocol PLC Meter Installed
Tabriz 45789 454 000006000503 DLMS Protocol PLC Meter Running
Tabriz HH890 HH890 000012080029 DLMS Protocol GPRS Meter Running
Tabriz 001 xiaofan 000012261233 DLMS Protocol GPRS Meter Running
Tabriz 5899test 5899test 000012261234 DLMS Protocol GPRS Meter Running
Tabriz 石洋3 石洋 000020120001 DLMS Protocol GPRS Meter Running
Tabriz df低 df低 000020121204 DLMS Protocol PLC Meter Running
Tabriz 1243124214 1sw12 000020121205 DLMS Protocol PLC Meter Running
Tabriz shiy777 shiy777 000020121206 DLMS Protocol PLC Meter Running
Tabriz 000020121207 DLMS Protocol PLC Meter Running
Page 1 of 3
30
Show 1 to 30 Records, total 80 Records

Figure 75 Query Meter

Meter type change: choose one meter in the meter list. If it is PLC Meter, then you need to fill in relevant information such as “Communication Protocol, APN”. Those items marked with “*”are mandatory, the rest are optional. Then click “PLC to GPRS” button to change the PLC Meter to GPRS Meter. If this meter is GPRS Meter, directly click “GPRS to PLC” button to change it to PLC Meter. The interface is as follows:

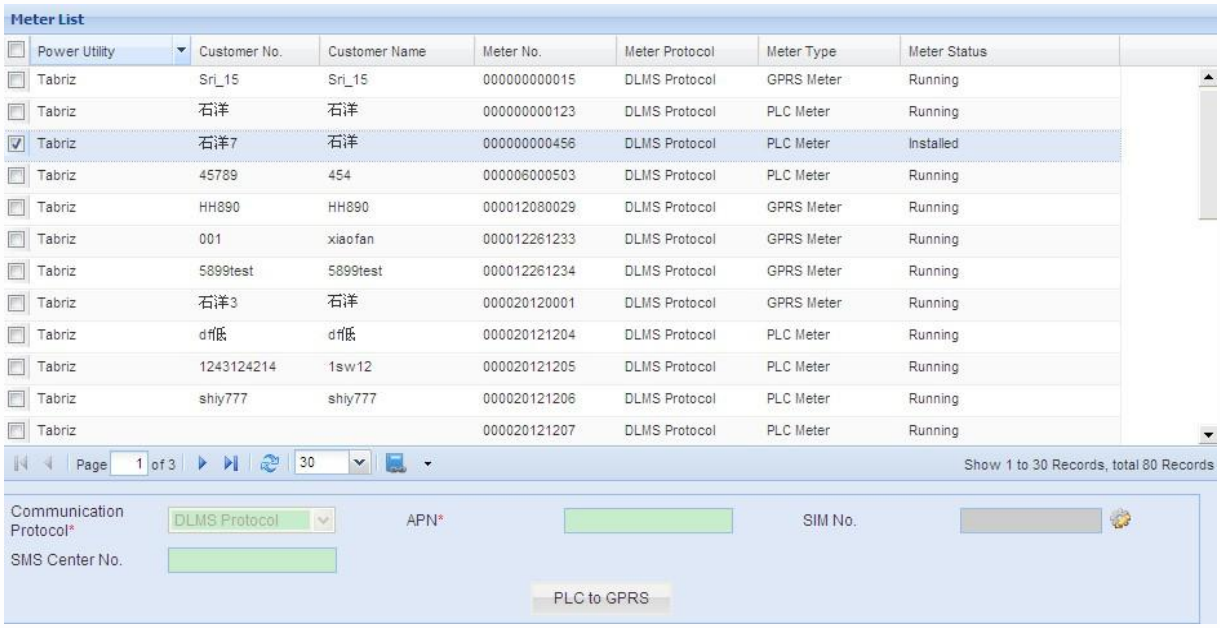

Meter List
Power Utility
Customer No.
Customer Name
Meter No.
Meter Protocol
Meter Type
Meter Status
Tabriz Sri_15 Sri_15 000000000015 DLMS Protocol GPRS Meter Running
Tabriz 石洋 石洋 000000000123 DLMS Protocol PLC Meter Running
Tabriz 石洋7 石洋 000000000456 DLMS Protocol PLC Meter Installed
Tabriz 45789 454 000006000503 DLMS Protocol PLC Meter Running
Tabriz HH890 HH890 000012080029 DLMS Protocol GPRS Meter Running
Tabriz 001 xiaofan 000012261233 DLMS Protocol GPRS Meter Running
Tabriz 5899test 5899test 000012261234 DLMS Protocol GPRS Meter Running
Tabriz 石洋3 石洋 000020120001 DLMS Protocol GPRS Meter Running
Tabriz df低 df低 000020121204 DLMS Protocol PLC Meter Running
Tabriz 1243124214 1sw12 000020121205 DLMS Protocol PLC Meter Running
Tabriz shiy777 shiy777 000020121206 DLMS Protocol PLC Meter Running
Tabriz 000020121207 DLMS Protocol PLC Meter Running
Page 1 of 3
30
Show 1 to 30 Records, total 80 Records
Communication Protocol*
DLMS Protocol
APN*
SIM No.
SMS Center No.
PLC to GPRS

Figure 76 PLC to GPRS

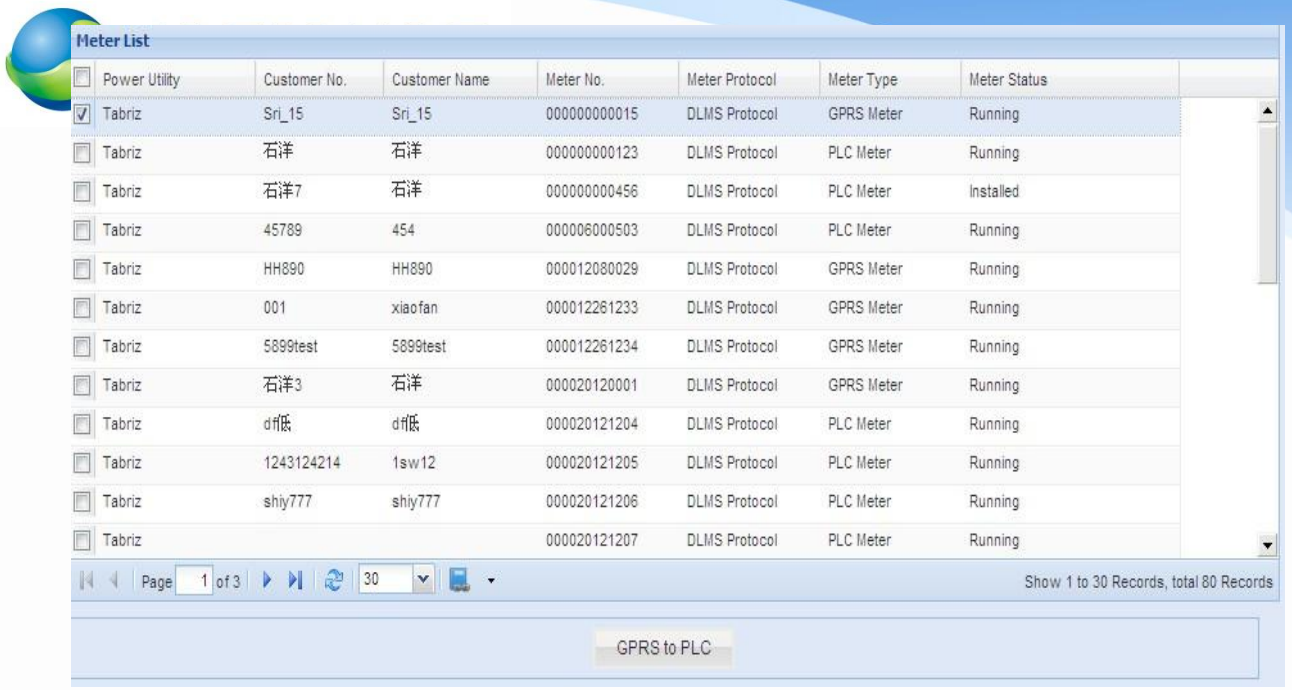

Meter List
Power Utility
Customer No.
Customer Name
Meter No.
Meter Protocol
Meter Type
Meter Status
Tabriz Sri_15 Sri_15 000000000015 DLMS Protocol GPRS Meter Running
Tabriz 石洋 石洋 000000000123 DLMS Protocol PLC Meter Running
Tabriz 石洋7 石洋 000000000456 DLMS Protocol PLC Meter Installed
Tabriz 45789 454 000006000503 DLMS Protocol PLC Meter Running
Tabriz HH890 HH890 000012080029 DLMS Protocol GPRS Meter Running
Tabriz 001 xiaofan 000012261233 DLMS Protocol GPRS Meter Running
Tabriz 5899test 5899test 000012261234 DLMS Protocol GPRS Meter Running
Tabriz 石洋3 石洋 000020120001 DLMS Protocol GPRS Meter Running
Tabriz df低 df低 000020121204 DLMS Protocol PLC Meter Running
Tabriz 1243124214 1sw12 000020121205 DLMS Protocol PLC Meter Running
Tabriz shiy777 shiy777 000020121206 DLMS Protocol PLC Meter Running
Tabriz 000020121207 DLMS Protocol PLC Meter Running
Page 1 of 3
30
Show 1 to 30 Records, total 80 Records
GPRS to PLC

Figure 77 GPRS to PLC

5. Installation Management

5.1. Installation Management

[Menu] Basic > Installation Management > Installation Management

[Function] to finish the installation of Meter, Terminal, and Data Collector

[Step]

Installation Query: Choose Power Utility, Feeder Line, Transformer Area, Transformer, Equipment node at the left tree. Fill in the information like “terminal number, terminal type, terminal usage, and terminal status” to filter the terminals. Then click “Query” button to get the terminal query result list.

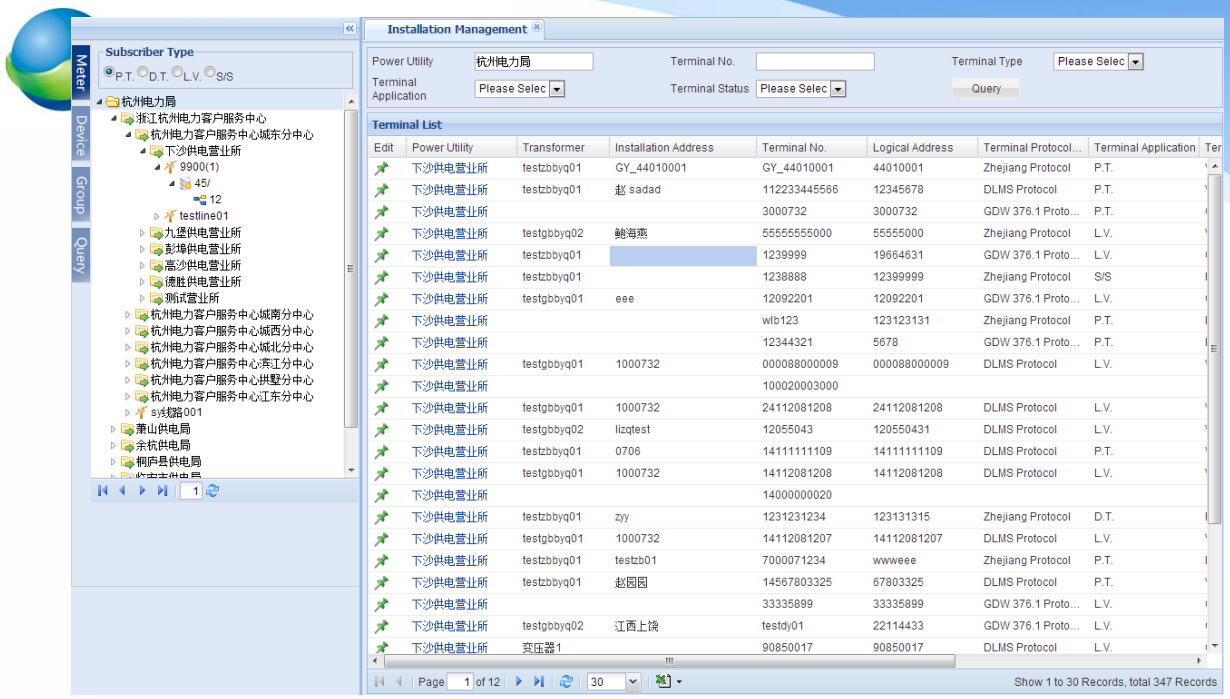


Figure 78 Installation Query

Click “Install and Connect” button to make the installation operation. Enter different installation interfaces accroding to Terminal Application.

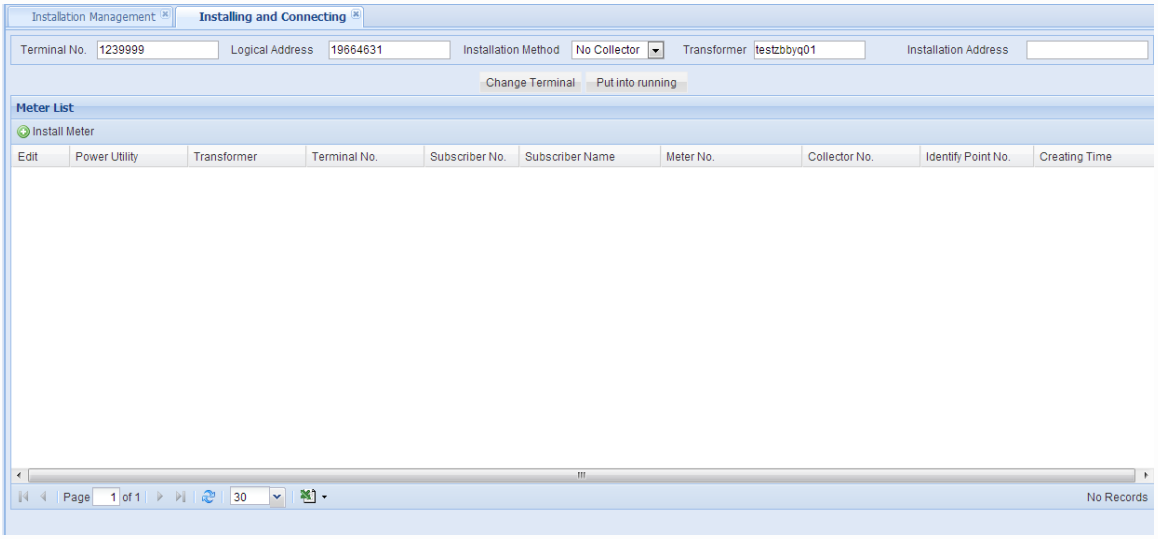


Figure 79 Main Interface of Low Voltage Installation

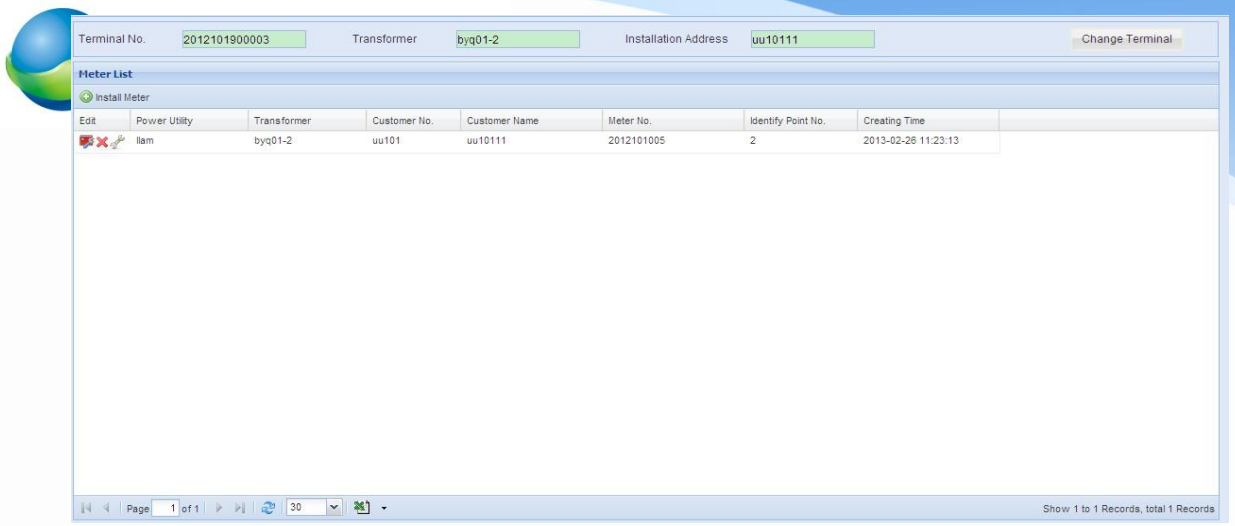


Figure 80 Main Interface of High Voltage Installation

Installation: If the Terminal Usage is for low voltage, enter the low voltage interface, and choose "Installation Method, Transformer, and Installation Address". If the Terminal Usage is for private or public transformer, choose "Transformer, Installation Address".(Installation Address is optional). Click "Install Meter" button, and the list of available meters that can be installed will be displayed. Check the meter that needs to be installed according to conditions like "Meter No, Customer No, Customer Name, and Meter Type". The meter list is as follows.

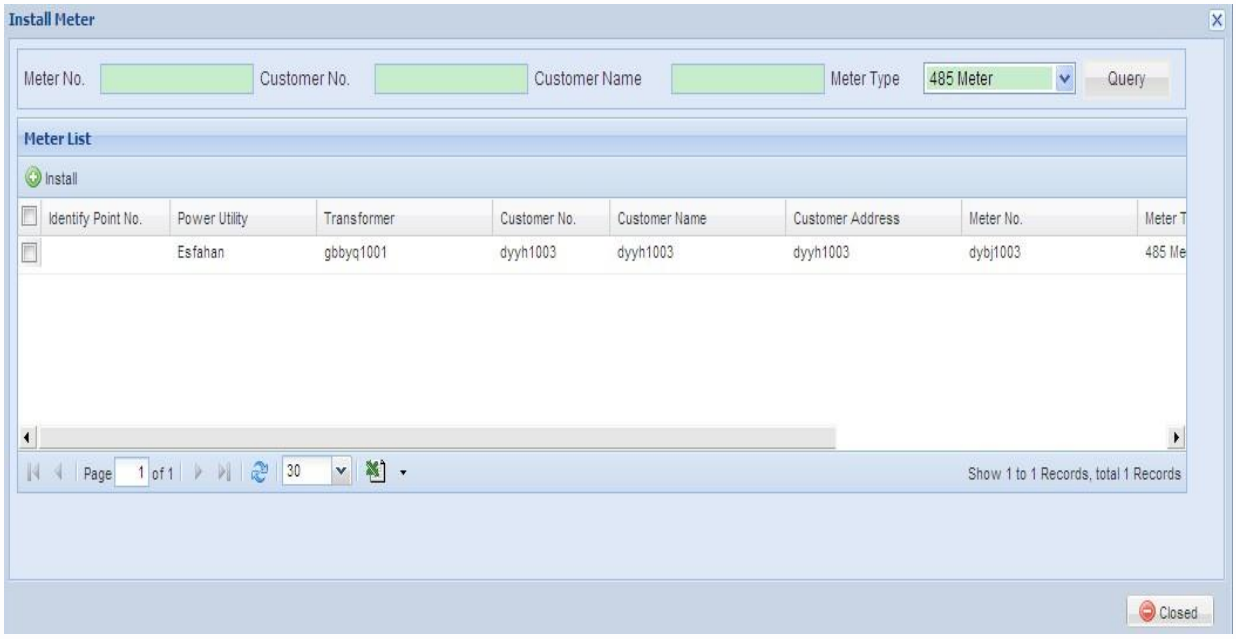


Figure 81 Available Meters for Installation

Choose the meter which needs to be installed (the corresponding Identity Point No. is optional), and click "Install" button to complete the installation. After installation, you

can find the relevant Identity Point of installed meter in the Identity Point list in the installation interface. One identify point is associated with one meter.

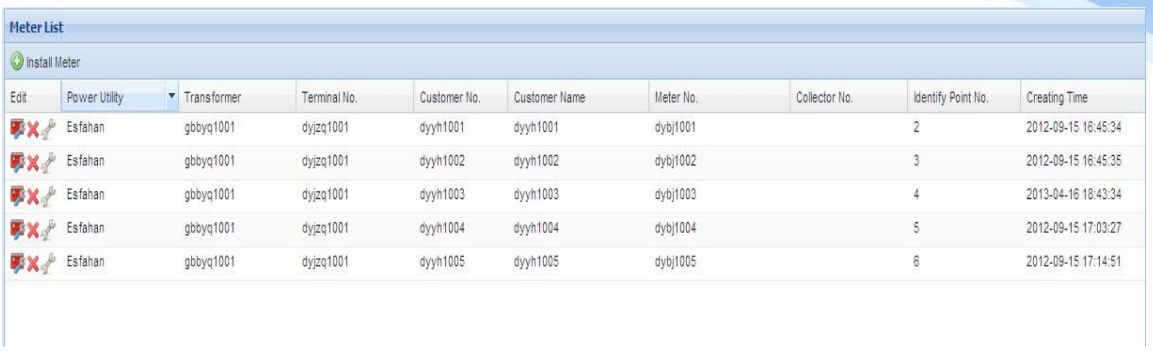

Meter List
Install Meter
Edit
Power Utility
Transformer
Terminal No.
Customer No.
Customer Name
Meter No.
Collector No.
Identify Point No.
Creating Time
Esfahan gbbyq1001 dyjzq1001 dyyh1001 dyyh1001 dybj1001 2 2012-09-15 16:45:34
Esfahan gbbyq1001 dyjzq1001 dyyh1002 dyyh1002 dybj1002 3 2012-09-15 16:45:35
Esfahan gbbyq1001 dyjzq1001 dyyh1003 dyyh1003 dybj1003 4 2013-04-16 18:43:34
Esfahan gbbyq1001 dyjzq1001 dyyh1004 dyyh1004 dybj1004 5 2012-09-15 17:03:27
Esfahan gbbyq1001 dyjzq1001 dyyh1005 dyyh1005 dybj1005 6 2012-09-15 17:14:51

Figure 82 Identify Point List

Delete Identify Point: Click "Delete the Identify Point" button to delete the identify point and cancel the association relationship between meter and terminal.

Change Meter: Click the "Change the Meter" button, and it will show the list of meters which can be changed. Query the meter that needs to be changed by filling in the meter number and choosing the meter type. Choose the meter which needs to be changed, and click "Change Meter" button.

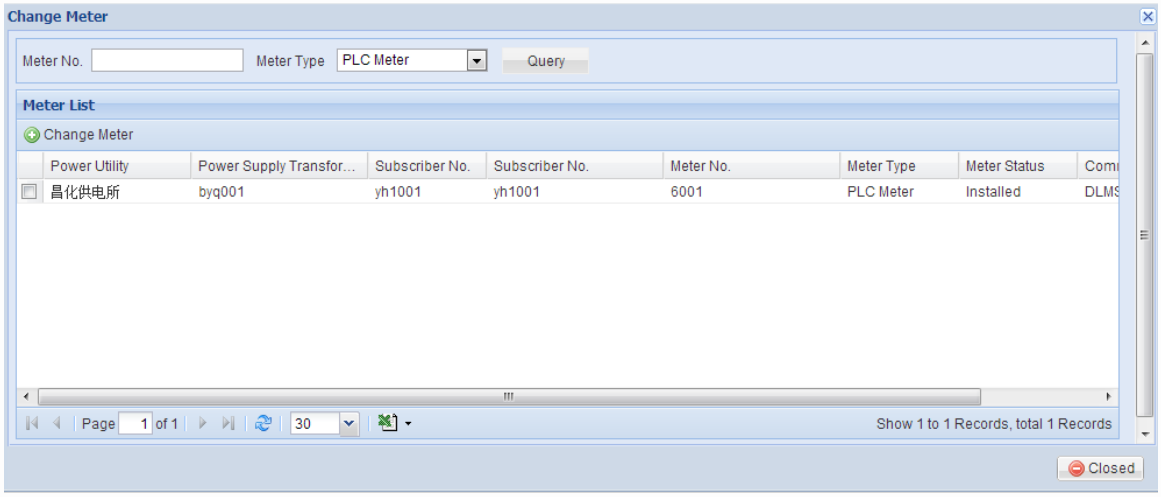


Figure 83 The List of Meters That Can be Changed

Change the Identify Point No.: Click "Change the Identify Point" button, and the identify point changing interface will be shown. fill in the new identify point number, and click "Change" button to change the indentify point number.

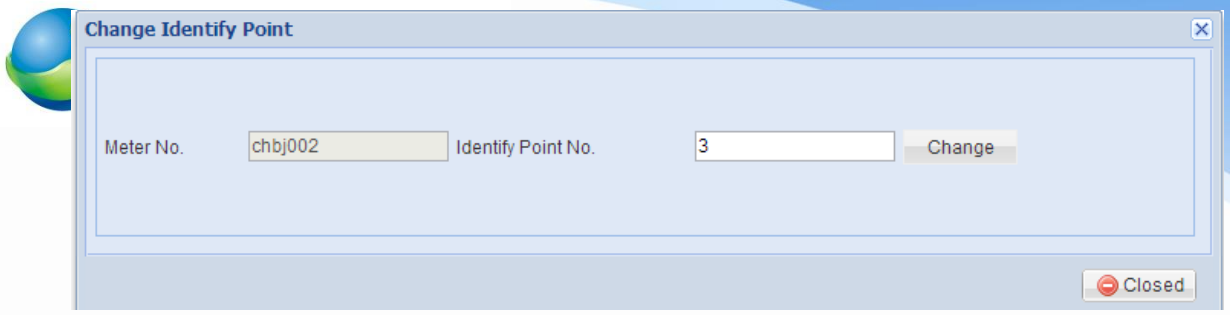


Figure 84 Change the Identify Point Number

Change Terminal: Click “Change Terminal” button and the alternative terminals list will be shown. Query the terminal that needs to be changed by filling in the terminal bureau number and choosing the terminal status. Choose the terminal that need to change and click “Change Terminal” button.

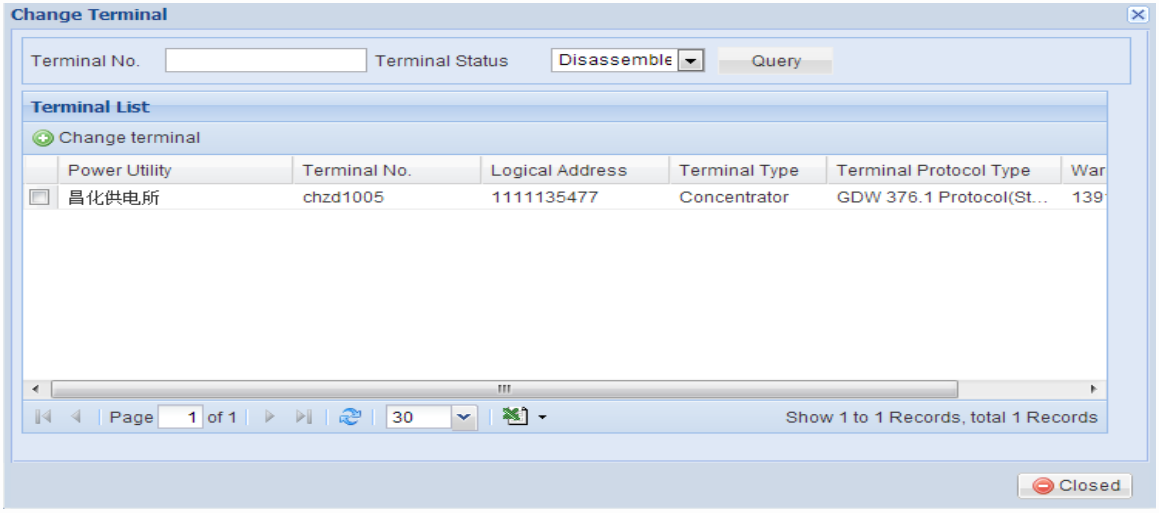


Figure 85 Change Terminal

Put terminal into operation: If the Terminal Usage is for low voltage, please enter the low voltage interface, and choose “Installation Method, Transformer, and Installation Address”. If the Terminal Usage is for private or public transformer, choose “Transformer, Installation Address”.(Installation Address is optional). Click “ Put into running” button to put the terminal into operation.

If the Terminal Usage is for low voltage , and the Installation Method of terminal is chosen as “with Collector”, please install the collector first, then install the meter under the collector.

Install collector: Click “Connect Collector” button and the the collector list will be shown. Query the collectors that need to install by filling in the collector burea numer and choosing the collector status. Choose the collector, and click “Install” button to

complete the installation of collector.

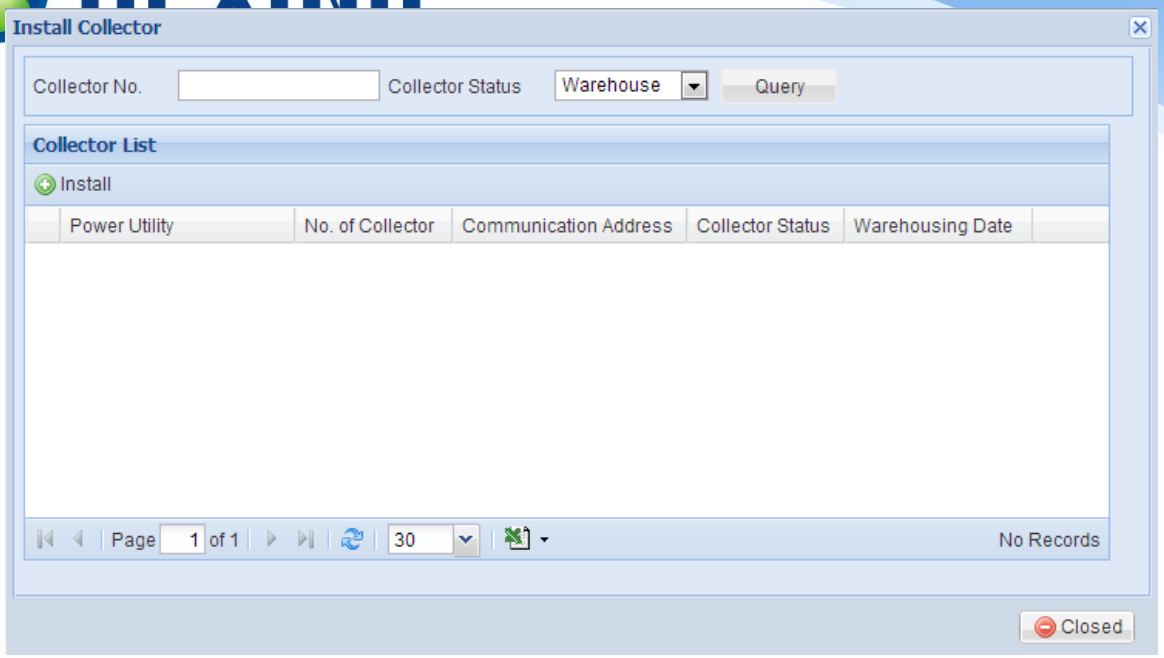


Figure 86 List of Collectors that Can Be Installed

After installing the collectors, the installed collectors will be shown in the interface of collector list.

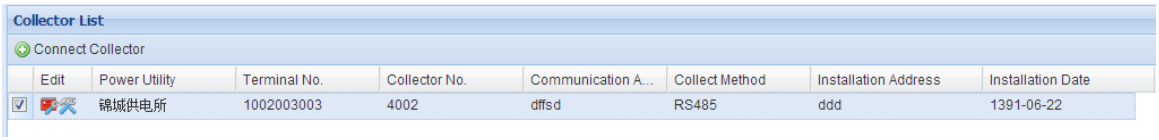


Figure 87 Collectors List

Install Meter: Click one of the collectors, and click “Install Meter” button to install the meter for this collector. The list of available meters that can be installed will be shown. Query the list of meters that need to be installed by filling in the Meter Bureau No, Customer No., Customer Name, and choosing the Meter Type.

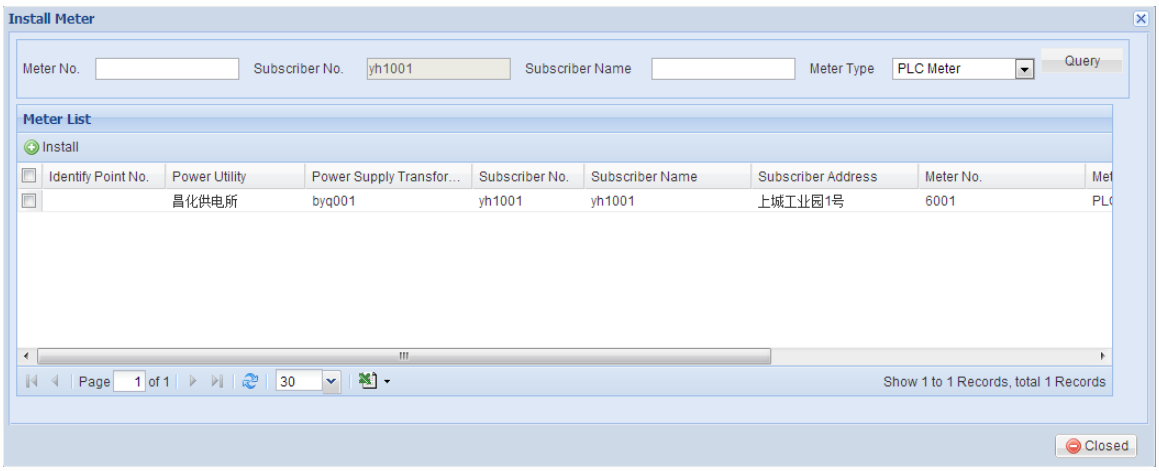


Figure 88 List of Meters that Can Be Installed

Choose the meters which need to be installed (the corresponding Identity Point No. is optional). click “Install” button to complet the meter installation.

Remove Collector: Click “Remove and Take Back” button to remove the collector. After the collector is removed, the meters under this collector will also be removed.

Change Collector: Click “Change the Collector” button and the list of alternative meters will be shown. query the collector that needs to be changed by filling in the Colllector No and choosing the Collector Status. Choose the collector and click “Replace” button.

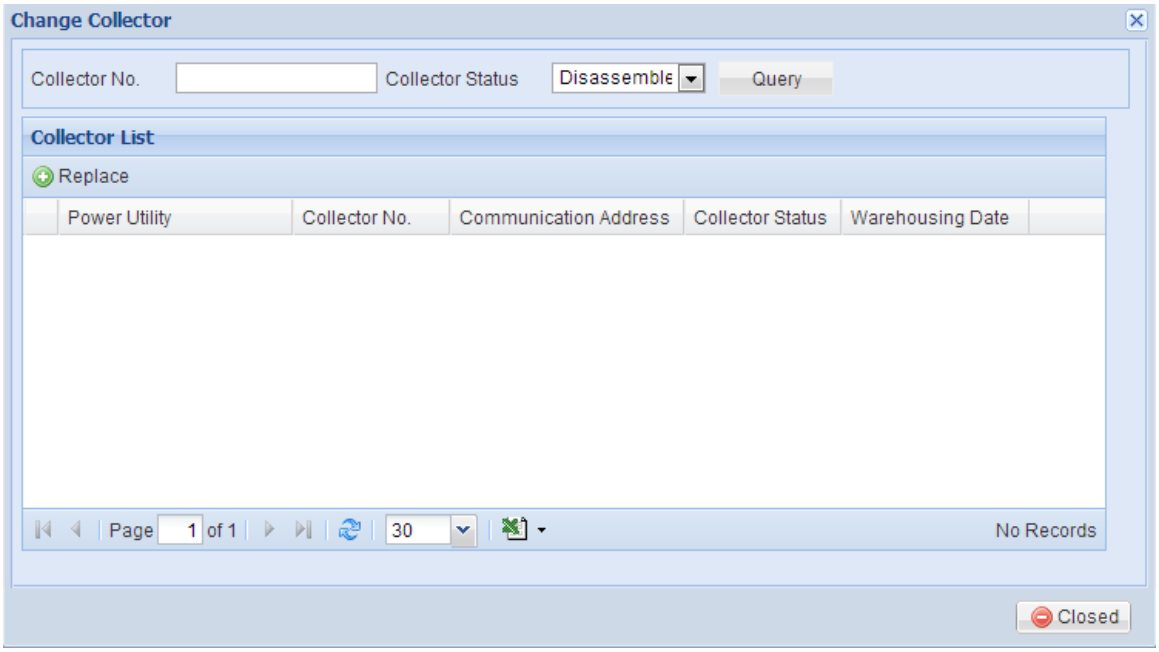


Figure 89 List of Collectors That Can Be Changed

Put virtual terminal into operation: If the Terminal Type is virtual terminal, please directly click “Put into running” button in the installation query interface without entering the installation interface. Then click “OK”.

Failed Task Management: Click “Failed Task Management” button to enter the “Failed Task Management” interface. Choose the Power Utility, fill in the “Terminal No,Task Template”, and click “Query” button to check the failed tasks information. Click “Reissue” button, choose the re-issue time to reissue failed tasks. The interface is shown as below.

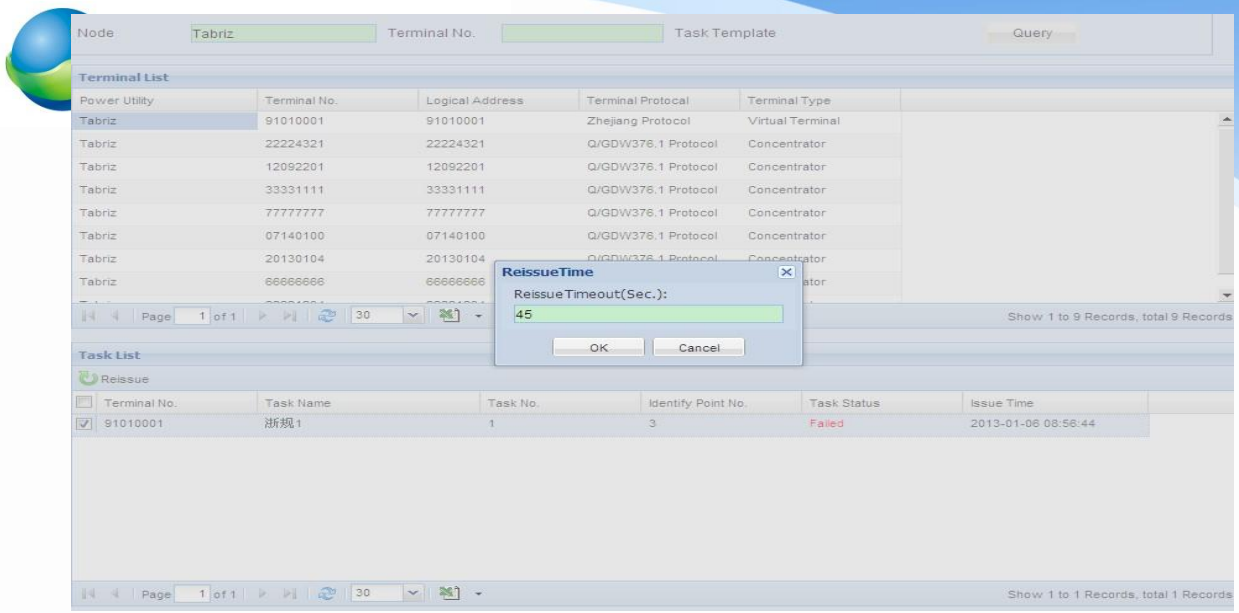


Figure 90 Failed Task Reissuance

Note!

1. when installing the public transformer network meter, the customer but not the meter should be chosen.

2. for high voltage collector terminal, only the high voltage meter can be installed. And during the installation, feeder line should be chosen instead of transformer.

5.2. Installation Statistics

[Menu] Basic > Installation Management > Installation Statistics

[Function] to make statistics for the quantity of installed terminals and the quantity of installed customers

[Step]

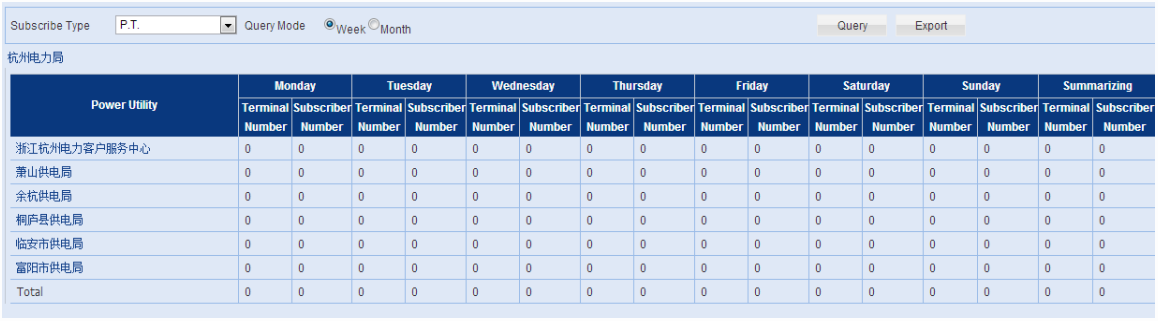
Choose the “User Type, Query Mode”. The query modes include weekly statistics and monthly statistics. click “Query” button to show the statistics results. Please choose the month when monthly statistics is needed.

Weekly statistics: the result shows the quantity of installed terminals and the quantity of installed customers of each Power Utility for each day in one week.

Monthly statistics: the result shows below data of each Power Utility for one month: the quantity of installed terminals, the quantity of installed customers, the

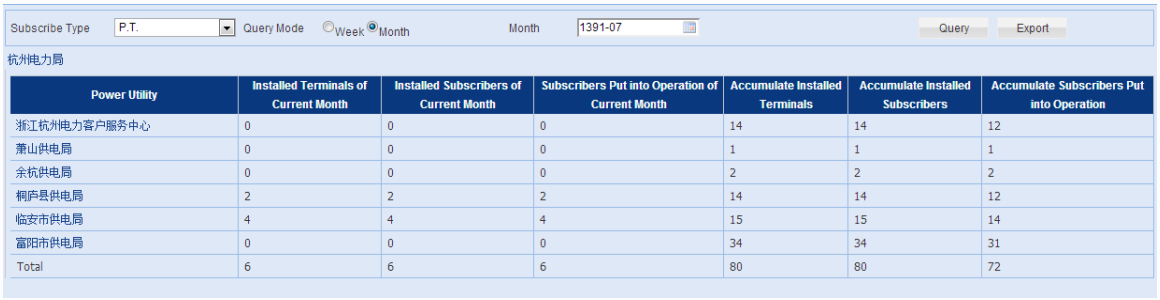
number of customers put into operation, the accumulative total number of installed terminals, the accumulative total number of installed customers, and the accumulative total number of customers put into operation.

Click “Export” button to import the statistics result to Excel file.



Power Utility	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday		Summarizing	
	Terminal Number	Subscriber Number	Terminal Number	Subscriber Number	Terminal Number	Subscriber Number	Terminal Number	Subscriber Number	Terminal Number	Subscriber Number	Terminal Number	Subscriber Number	Terminal Number	Subscriber Number	Terminal Number	Subscriber Number
浙江杭州电力客户服务中心	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
萧山供电局	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
余杭供电局	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
桐庐县供电局	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
临安市供电局	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
富阳市供电局	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Figure 91 Weekly Statistics Result



Power Utility	Installed Terminals of Current Month	Installed Subscribers of Current Month	Subscribers Put into Operation of Current Month	Accumulate Installed Terminals	Accumulate Installed Subscribers	Accumulate Subscribers Put into Operation
浙江杭州电力客户服务中心	0	0	0	14	14	12
萧山供电局	0	0	0	1	1	1
余杭供电局	0	0	0	2	2	2
桐庐县供电局	2	2	2	14	14	12
临安市供电局	4	4	4	15	15	14
富阳市供电局	0	0	0	34	34	31
Total	6	6	6	80	80	72

Figure 92 Monthly Statistics Result

5.3. Identify Point Parameter Reissuance

[Menu] Basic > Installation Management > Identify Point Parameter Reissue

[Function] Reissue Identify Point Parameters that failed in parameter issuing.

[Step]

Query: Click the tree node in the left, fill in Terminal No, and click “Query” button. The query results will be shown in the terminal list. The terminal list interface is as follows:

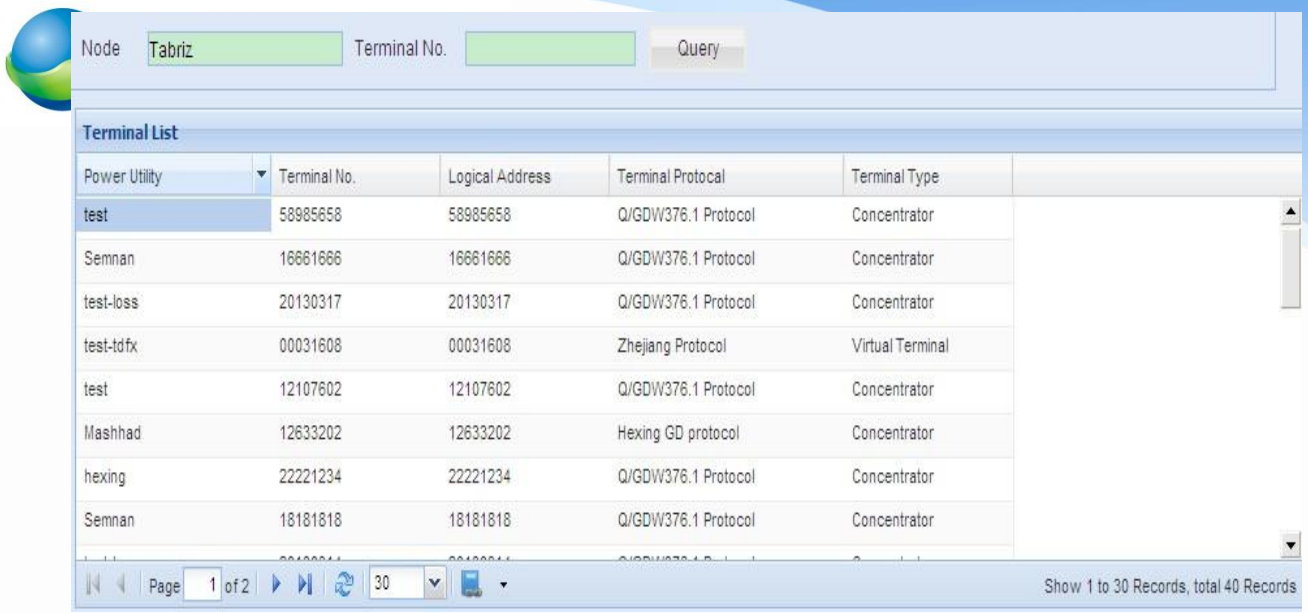


Figure 93 Terminal List

Identify Point Parameter Reissue: Click the terminal information in the terminal list. The unsuccessfully issued identify point information will be found out in the Identify Point List. Tick the identify points which need to reissue, click “Reissue” button, and choose the issuing time to reissue the parameter of indentify point. The interface is as follows:

Figure 94 Identify Point Parameter Reissue

5.4. Delete Identify Point Anormaly

[Menu] Basic > Installation Management > Delete Identify Point Anormaly

[Function] Re-delete the measuring point that was deleted unsuccessfully

[Step]

Query: Click the Power Utility tree node in the left side; fill in “Terminal Logic Address”, and click “Query” button. The query result will be shown in the list of deleting identify point anormaly. The interface is as follows:

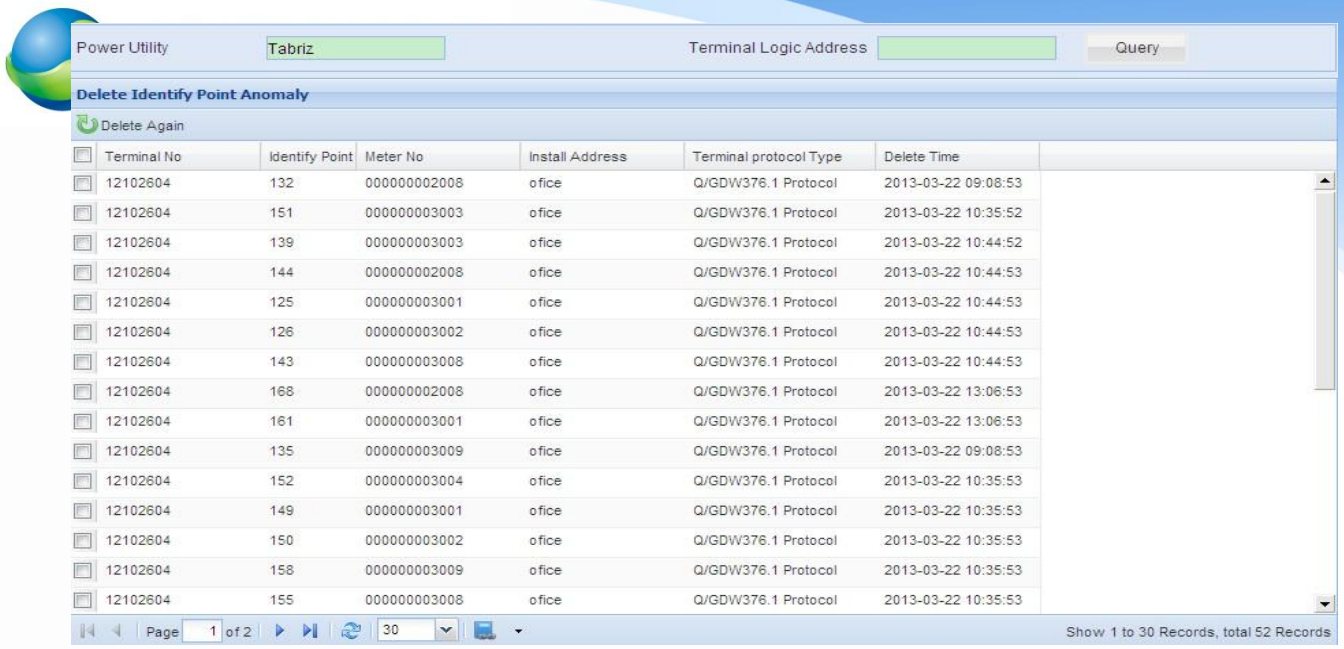


Figure 95 Delete Identify Point Anormaly

Re-delete Identify Point: Tick the identify point which need to re-delete, click "Delete Again" button, choose the re-delete time, and delete the identify point. The interface is as follows:

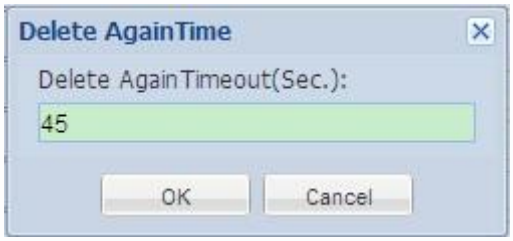


Figure 96 Identify Point Re-delete

6. Time Synchronization Management

6.1. Time Synchronization Management

[Menu] Basic > Clock Management > Time Synchronization Management

[Function] Make time synchronization management for the data concentrator, meter, and GPRS meter

[Step]

1) Choose one node in the left tree (Power Utility, feeder line, transformer area, transformer, terminal or meter), and all the terminals or meters under this node will

be shown in the relevant alternative user list.

2) Choose the terminals or meters that need time synchronization in the alternative user list, if it is Daylight Saving Time, tick the "DST" in the check box. Then query according to the customer type and terminal protocol type.

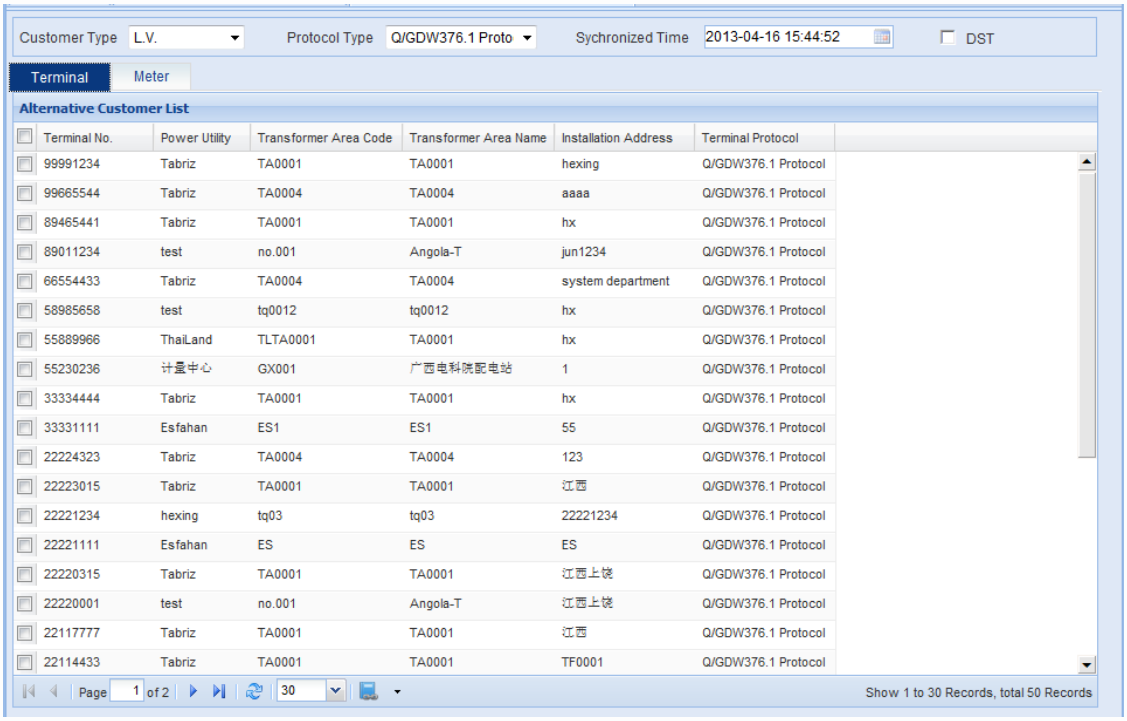

Customer Type L.V.
Protocol Type Q/GDW376.1 Proto
Sychronized Time 2013-04-16 15:44:52
DST
Terminal
Meter
Alternative Customer List
Terminal No. | Power Utility | Transformer Area Code | Transformer Area Name | Installation Address | Terminal Protocol
99991234 | Tabriz | TA0001 | TA0001 | hexing | Q/GDW376.1 Protocol
99665544 | Tabriz | TA0004 | TA0004 | aaaa | Q/GDW376.1 Protocol
89465441 | Tabriz | TA0001 | TA0001 | hx | Q/GDW376.1 Protocol
89011234 | test | no.001 | Angola-T | jun1234 | Q/GDW376.1 Protocol
66554433 | Tabriz | TA0004 | TA0004 | system department | Q/GDW376.1 Protocol
58985658 | test | tq0012 | tq0012 | hx | Q/GDW376.1 Protocol
55889966 | ThaiLand | TLTA0001 | TA0001 | hx | Q/GDW376.1 Protocol
55230236 | 计量中心 | GX001 | 广西电科院配电站 | 1 | Q/GDW376.1 Protocol
33334444 | Tabriz | TA0001 | TA0001 | hx | Q/GDW376.1 Protocol
33331111 | Esfahan | ES1 | ES1 | 55 | Q/GDW376.1 Protocol
22224323 | Tabriz | TA0004 | TA0004 | 123 | Q/GDW376.1 Protocol
22223015 | Tabriz | TA0001 | TA0001 | 江西 | Q/GDW376.1 Protocol
22221234 | hexing | tq03 | tq03 | 22221234 | Q/GDW376.1 Protocol
22221111 | Esfahan | ES | ES | ES | Q/GDW376.1 Protocol
22220315 | Tabriz | TA0001 | TA0001 | 江西上饶 | Q/GDW376.1 Protocol
22220001 | test | no.001 | Angola-T | 江西上饶 | Q/GDW376.1 Protocol
22117777 | Tabriz | TA0001 | TA0001 | 江西 | Q/GDW376.1 Protocol
22114433 | Tabriz | TA0001 | TA0001 | TF0001 | Q/GDW376.1 Protocol
Page 1 of 2
30
Show 1 to 30 Records, total 50 Records

Figure 97 Terminal List

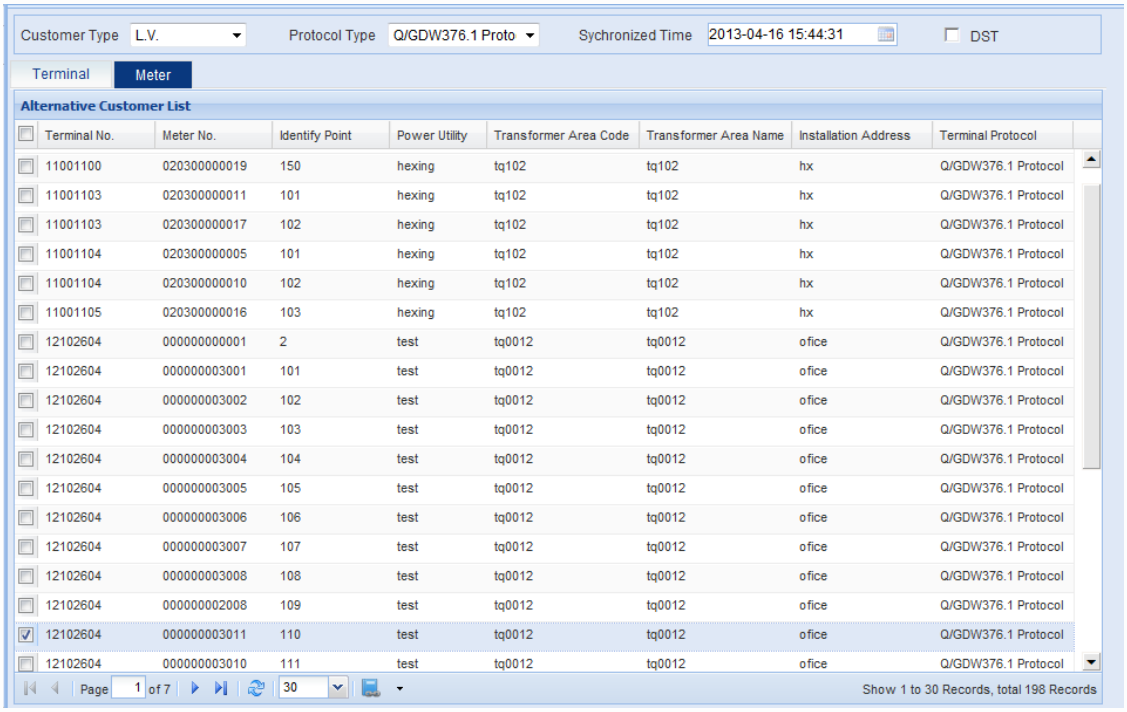

Customer Type L.V.
Protocol Type Q/GDW376.1 Proto
Sychronized Time 2013-04-16 15:44:31
DST
Terminal
Meter
Alternative Customer List
Terminal No. | Meter No. | Identify Point | Power Utility | Transformer Area Code | Transformer Area Name | Installation Address | Terminal Protocol
11001100 | 020300000019 | 150 | hexing | tq102 | tq102 | hx | Q/GDW376.1 Protocol
11001103 | 020300000011 | 101 | hexing | tq102 | tq102 | hx | Q/GDW376.1 Protocol
11001103 | 020300000017 | 102 | hexing | tq102 | tq102 | hx | Q/GDW376.1 Protocol
11001104 | 020300000005 | 101 | hexing | tq102 | tq102 | hx | Q/GDW376.1 Protocol
11001104 | 020300000010 | 102 | hexing | tq102 | tq102 | hx | Q/GDW376.1 Protocol
11001105 | 020300000016 | 103 | hexing | tq102 | tq102 | hx | Q/GDW376.1 Protocol
12102604 | 000000000001 | 2 | test | tq0012 | tq0012 | ofice | Q/GDW376.1 Protocol
12102604 | 000000003001 | 101 | test | tq0012 | tq0012 | ofice | Q/GDW376.1 Protocol
12102604 | 000000003002 | 102 | test | tq0012 | tq0012 | ofice | Q/GDW376.1 Protocol
12102604 | 000000003003 | 103 | test | tq0012 | tq0012 | ofice | Q/GDW376.1 Protocol
12102604 | 000000003004 | 104 | test | tq0012 | tq0012 | ofice | Q/GDW376.1 Protocol
12102604 | 000000003005 | 105 | test | tq0012 | tq0012 | ofice | Q/GDW376.1 Protocol
12102604 | 000000003006 | 106 | test | tq0012 | tq0012 | ofice | Q/GDW376.1 Protocol
12102604 | 000000003007 | 107 | test | tq0012 | tq0012 | ofice | Q/GDW376.1 Protocol
12102604 | 000000003008 | 108 | test | tq0012 | tq0012 | ofice | Q/GDW376.1 Protocol
12102604 | 000000002008 | 109 | test | tq0012 | tq0012 | ofice | Q/GDW376.1 Protocol
12102604 | 000000003011 | 110 | test | tq0012 | tq0012 | ofice | Q/GDW376.1 Protocol
12102604 | 000000003010 | 111 | test | tq0012 | tq0012 | ofice | Q/GDW376.1 Protocol
Page 1 of 7
30
Show 1 to 30 Records, total 198 Records

Figure 98 Meter List

3) Click "Reading Time" button to read the current time of equipment. The reading

result include: System Time, Device Time and Time Offset(S);

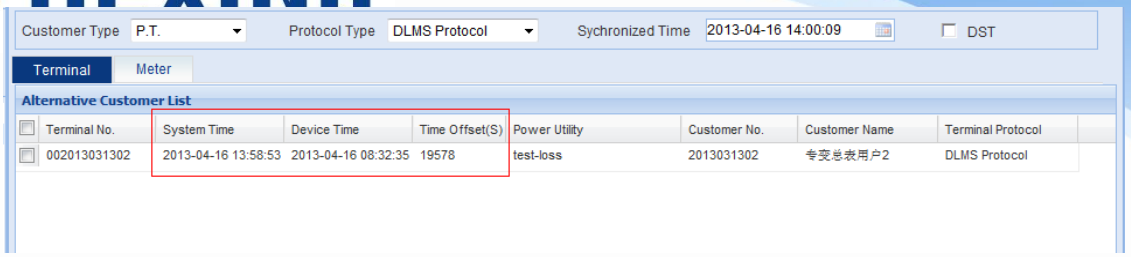


Figure 99 Reading Terminal Clock Successfully

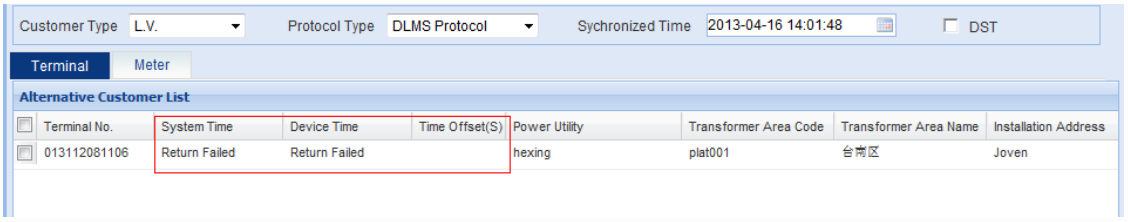


Figure 100 Reading Terminal Clock Failed

Click “Synchronizing Time” button to set the system time to the equipment. The setting result information will be shown.

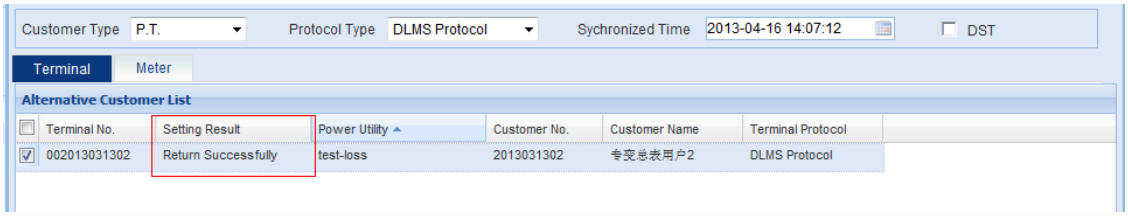


Figure 101 Terminal Synchronization Successful

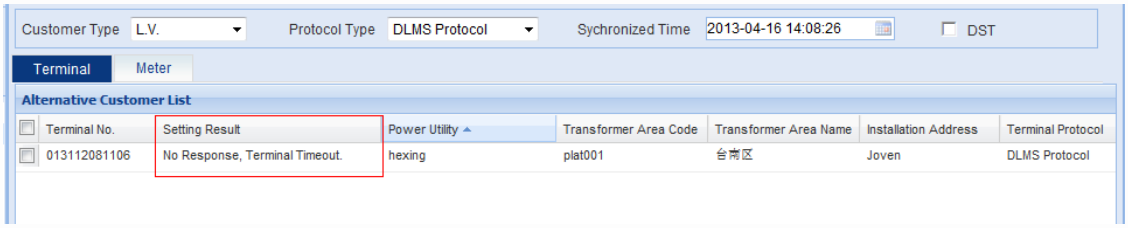


Figure 102 Terminal Synchronization Failed

Note!

The returned results have two types:

1) Successful
2) Failed

6.2. Automatic Time Synchronization Management

[Menu] Basic > Clock Management > Time Synchronization Management

[Function] make statistics for the collectors, meters and GPRS meter which failed in automatic time synchronization, and make manual management

[Step]

1) Choose one Power Utility in the left tree, all the terminals and meters under it will be shown in the alternative customer list.

2) Input the query conditions "Power Utility, Customer Type, Meter Type, Time Offset", and click "Query" button. There are two types of "Synchronization Time Result" in the alternative customer list: Synchronization Successful means automatic time synchronization is successful and the returned result will show "Read Time Success"; Failed means automatic time synchronization failed and the returned result will show "Failed".

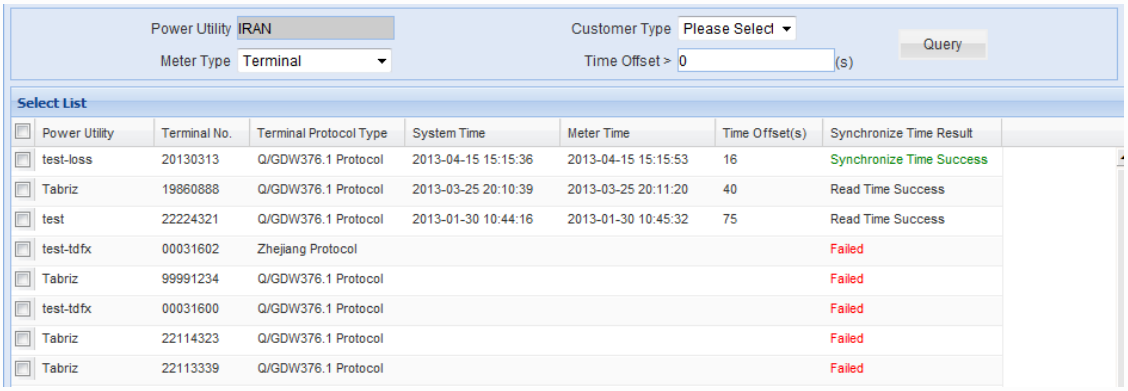

Power Utility IRAN
Customer Type Please Select
Meter Type Terminal
Time Offset > 0 (s)
Query
Select List
Power Utility | Terminal No. | Terminal Protocol Type | System Time | Meter Time | Time Offset(s) | Synchronize Time Result
test-loss | 20130313 | Q/GDW376.1 Protocol | 2013-04-15 15:15:36 | 2013-04-15 15:15:53 | 16 | Synchronize Time Success
Tabriz | 19860888 | Q/GDW376.1 Protocol | 2013-03-25 20:10:39 | 2013-03-25 20:11:20 | 40 | Read Time Success
test | 22224321 | Q/GDW376.1 Protocol | 2013-01-30 10:44:16 | 2013-01-30 10:45:32 | 75 | Read Time Success
test-tdfx | 00031602 | Zhejiang Protocol | | | | Failed
Tabriz | 99991234 | Q/GDW376.1 Protocol | | | | Failed
test-tdfx | 00031600 | Q/GDW376.1 Protocol | | | | Failed
Tabriz | 22114323 | Q/GDW376.1 Protocol | | | | Failed
Tabriz | 22113339 | Q/GDW376.1 Protocol | | | | Failed

Figure 103 Automatic Time Synchronization Audit Information

3) Click "Synchronizing Time" button to set the system time to the equipment. The setting result will be shown.

If the setting is successful, the result information will be returned. It contains System Time, Meter Time, Time Offset(S), and Synchronizing Time Result;

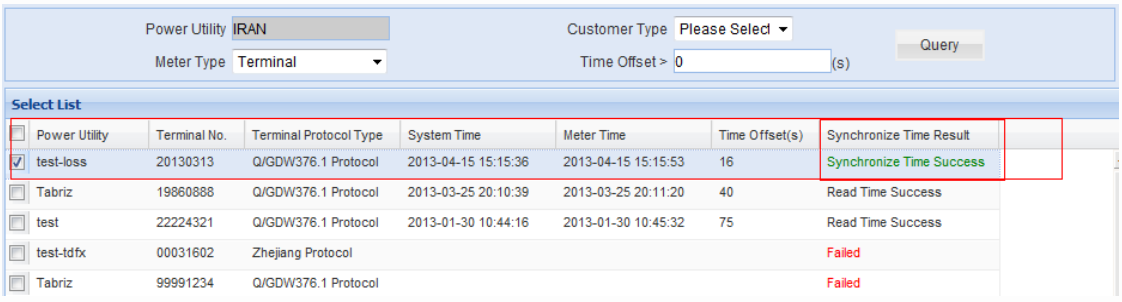

Power Utility IRAN
Customer Type Please Select
Meter Type Terminal
Time Offset > 0 (s)
Query
Select List
Power Utility | Terminal No. | Terminal Protocol Type | System Time | Meter Time | Time Offset(s) | Synchronize Time Result
test-loss | 20130313 | Q/GDW376.1 Protocol | 2013-04-15 15:15:36 | 2013-04-15 15:15:53 | 16 | Synchronize Time Success
Tabriz | 19860888 | Q/GDW376.1 Protocol | 2013-03-25 20:10:39 | 2013-03-25 20:11:20 | 40 | Read Time Success
test | 22224321 | Q/GDW376.1 Protocol | 2013-01-30 10:44:16 | 2013-01-30 10:45:32 | 75 | Read Time Success
test-tdfx | 00031602 | Zhejiang Protocol | | | | Failed
Tabriz | 99991234 | Q/GDW376.1 Protocol | | | | Failed

Figure 104 Setting Successful

If the setting failed: the returned result information will show "Failed".

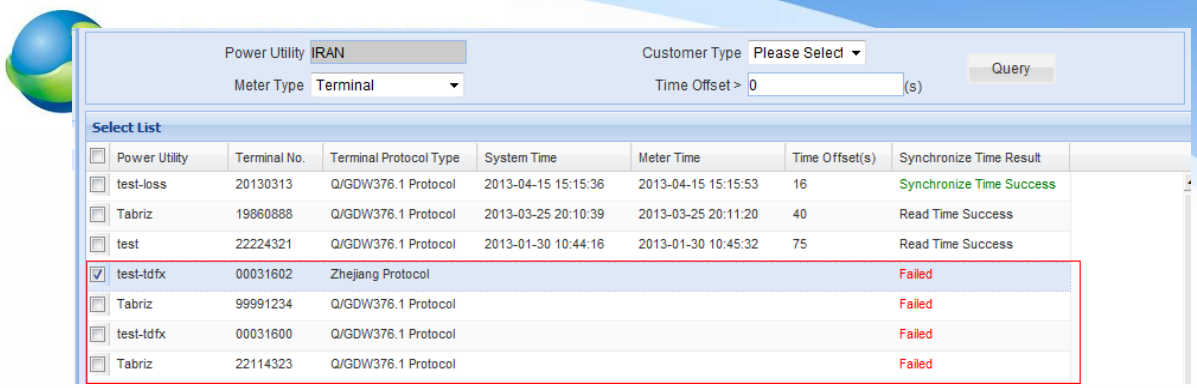

Power Utility IRAN
Customer Type Please Select
Meter Type Terminal
Time Offset > 0 (s)
Query
Select List
Power Utility | Terminal No. | Terminal Protocol Type | System Time | Meter Time | Time Offset(s) | Synchronize Time Result
test-loss | 20130313 | Q/GDW376.1 Protocol | 2013-04-15 15:15:36 | 2013-04-15 15:15:53 | 16 | Synchronize Time Success
Tabriz | 19860888 | Q/GDW376.1 Protocol | 2013-03-25 20:10:39 | 2013-03-25 20:11:20 | 40 | Read Time Success
test | 22224321 | Q/GDW376.1 Protocol | 2013-01-30 10:44:16 | 2013-01-30 10:45:32 | 75 | Read Time Success
test-tdfx | 00031602 | Zhejiang Protocol | | | | Failed
Tabriz | 99991234 | Q/GDW376.1 Protocol | | | | Failed
test-tdfx | 00031600 | Q/GDW376.1 Protocol | | | | Failed
Tabriz | 22114323 | Q/GDW376.1 Protocol | | | | Failed

Figure 105 Setting Failed

Note!

The returned results have two types:

1) Successful
2) Failed

7. Message Query

7.1. Message Query

[Menu] Basic > Message Query > Message Query

[Function] Check the Communication Message between the Master Station and Meter

[Step]

1) Choose one terminal in the left equipment tree, and the system will show the Logical Address and Installation Address of terminal in the message query interface;
2) Input the query condition: Start Date, End Date, Message Direction and Message Type;
3) Click “Query Message” button, the system will show the query result in the message list according to the query conditions.

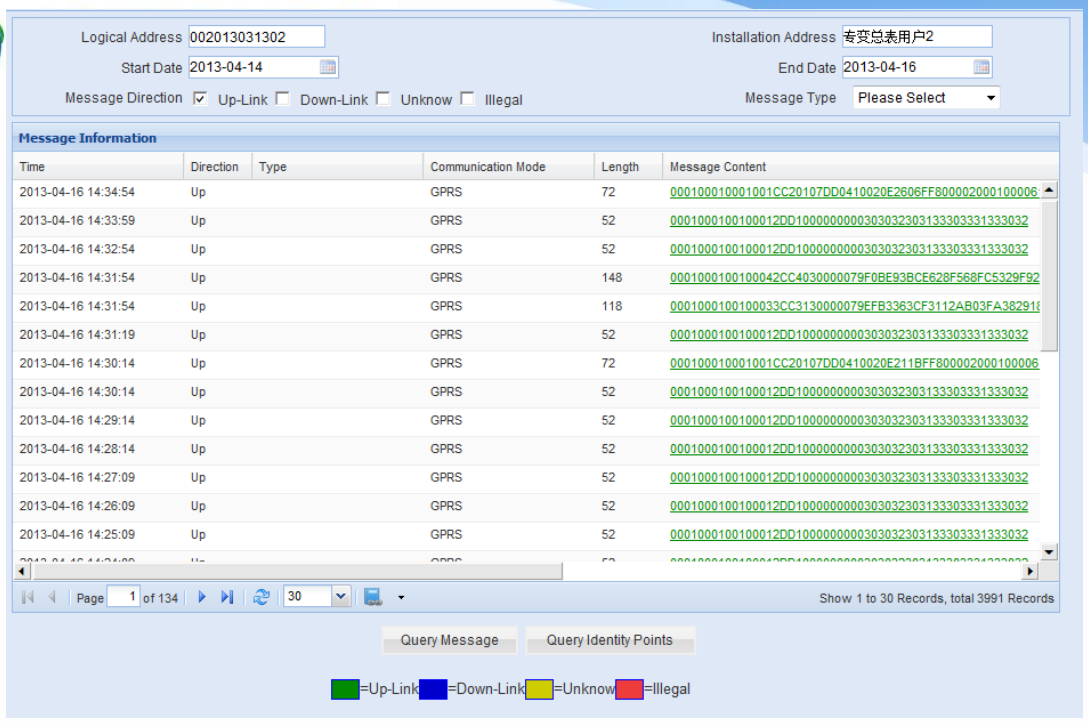

Logical Address 002013031302
Installation Address 专变总表用户2
Start Date 2013-04-14
End Date 2013-04-16
Message Direction Up-Link Down-Link Unknow Illegal
Message Type Please Select
Message Information
Time Direction Type Communication Mode Length Message Content
2013-04-16 14:34:54 Up GPRS 72
2013-04-16 14:33:59 Up GPRS 52
2013-04-16 14:32:54 Up GPRS 52
2013-04-16 14:31:54 Up GPRS 148
2013-04-16 14:31:54 Up GPRS 118
2013-04-16 14:31:19 Up GPRS 52
2013-04-16 14:30:14 Up GPRS 72
2013-04-16 14:30:14 Up GPRS 52
2013-04-16 14:29:14 Up GPRS 52
2013-04-16 14:28:14 Up GPRS 52
2013-04-16 14:27:09 Up GPRS 52
2013-04-16 14:26:09 Up GPRS 52
2013-04-16 14:25:09 Up GPRS 52
Page 1 of 134
30
Show 1 to 30 Records, total 3991 Records
Query Message
Query Identity Points
=Up-Link =Down-Link =Unknow =Illegal

Figure 106 Query Message

4) Click message content to check the details.

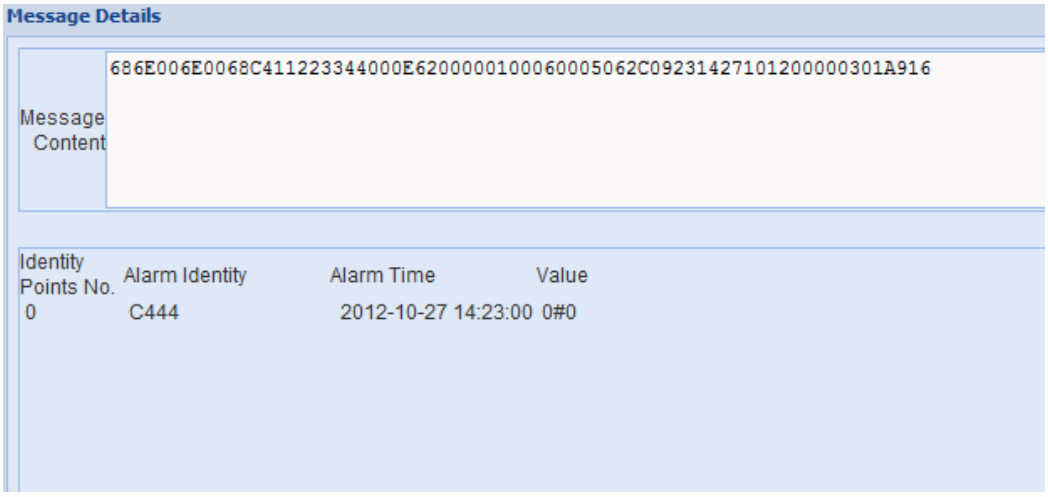


Figure 107 Message Details

5) Click “Query Identity Points” button to check the details of identify point of this terminal.

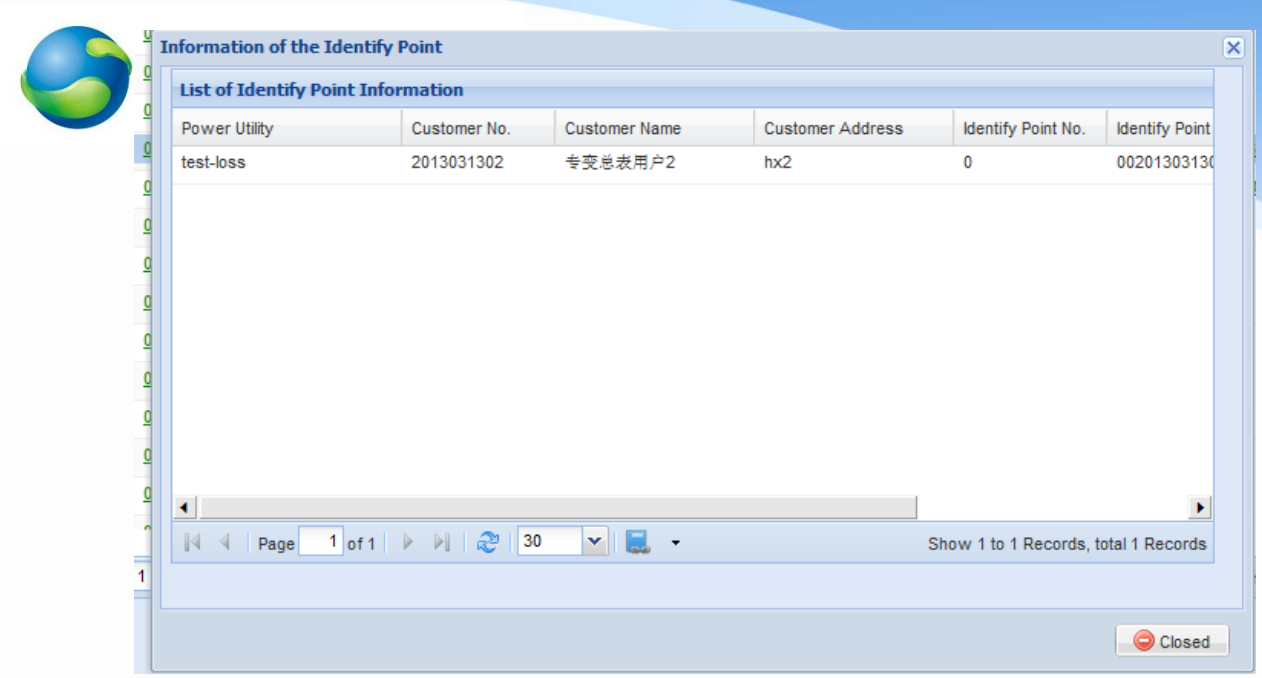


Figure 108 Identify Point Message

Note!

Message Direction: Up-Link, Down-Link, Unknown, Illegal;

Message Type: Relaying, Read programming log, Reading current data, Reading task data, Real-time writing object parameters, Writing object parameters, Warning confirmation, User-defined data, login, Login exit, Heartbeat, Request send SMS, Receive SMS Report, Exception alarm.

8. Task Management

8.1. Task Template Management

[Menu] Basic> Task Management> Task Template Management

[Function] Manage the configuration of terminal task and master station task for the equipment

[Step]

8.1.1. Terminal Task Template

1) Input Query Condition: Customer Type, Protocol Type, Template Name, and click

"Query" button. The system will show the query result in the list according to the query conditions.

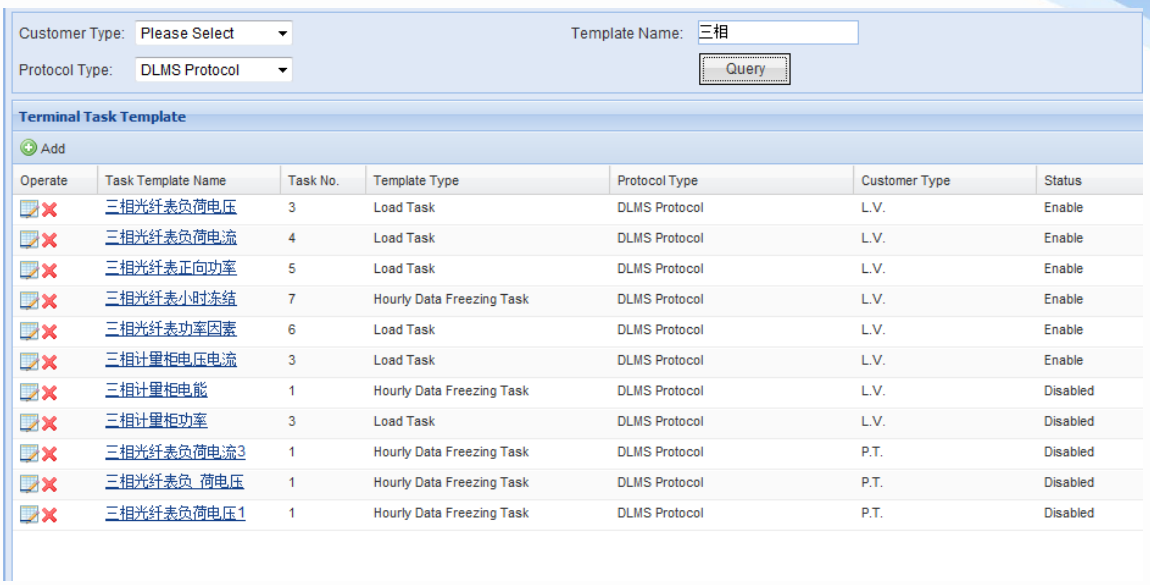

Customer Type: Please Select
Protocol Type: DLMS Protocol
Template Name: 三相
Query
Terminal Task Template
Add
Operate | Task Template Name | Task No. | Template Type | Protocol Type | Customer Type | Status
三相光纤表负荷电压 | 3 | Load Task | DLMS Protocol | L.V. | Enable
三相光纤表负荷电流 | 4 | Load Task | DLMS Protocol | L.V. | Enable
三相光纤表正向功率 | 5 | Load Task | DLMS Protocol | L.V. | Enable
三相光纤表小时冻结 | 7 | Hourly Data Freezing Task | DLMS Protocol | L.V. | Enable
三相光纤表功率因素 | 6 | Load Task | DLMS Protocol | L.V. | Enable
三相计量柜电压电流 | 3 | Load Task | DLMS Protocol | L.V. | Enable
三相计量柜电能 | 1 | Hourly Data Freezing Task | DLMS Protocol | L.V. | Disabled
三相计量柜功率 | 3 | Load Task | DLMS Protocol | L.V. | Disabled
三相光纤表负荷电流3 | 1 | Hourly Data Freezing Task | DLMS Protocol | P.T. | Disabled
三相光纤表负 荷电压 | 1 | Hourly Data Freezing Task | DLMS Protocol | P.T. | Disabled
三相光纤表负荷电压1 | 1 | Hourly Data Freezing Task | DLMS Protocol | P.T. | Disabled

Figure 109 Terminal Template List Information

2) Newly Added Terminal Task Template

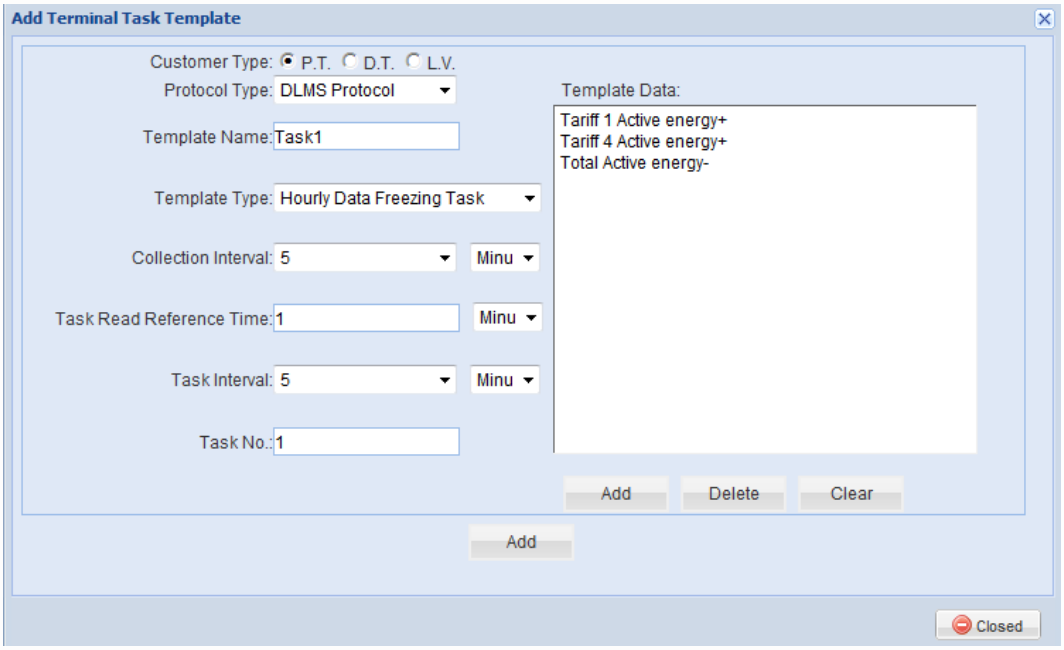


Figure 110 DLMS Protocol Template Information

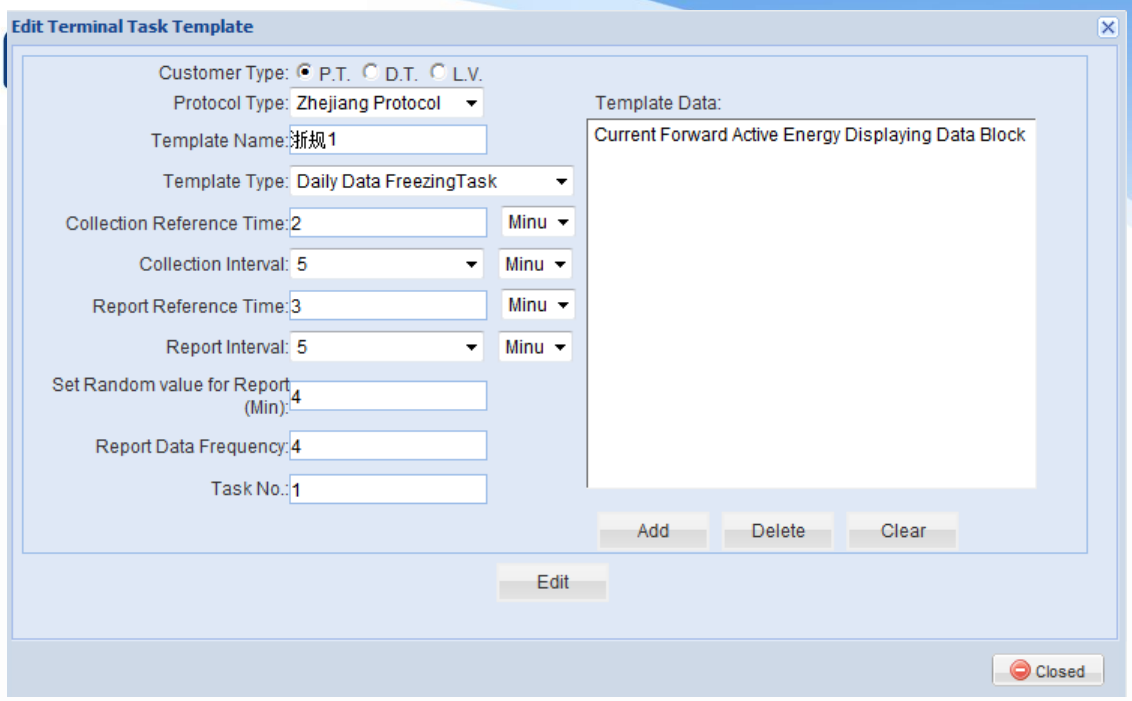


Figure 111 Zhejiang Province Protocol Template Information

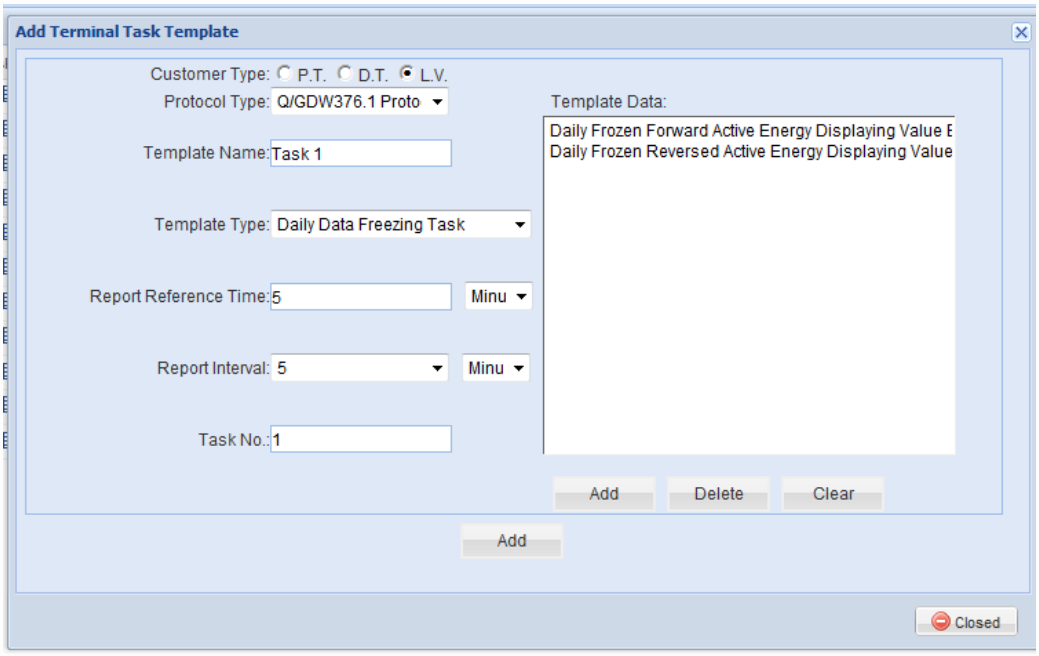


Figure 112 China State Grid Protocol Template Information

Click “Add” button. If adding is successful, it will prompt the successful message; and vice versa.

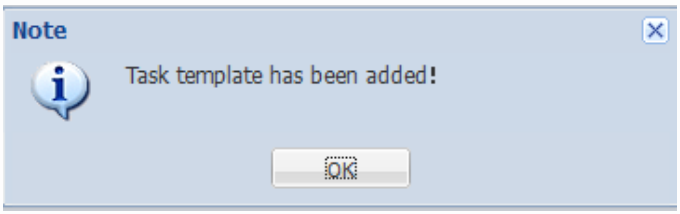


Figure 113 Template Adding Successfully

3) Modify Terminal Task

Choose one template in the template list. Click “Edit” button to enter the “Edit terminal task template” management interface. Input the template information that needs to be modified.

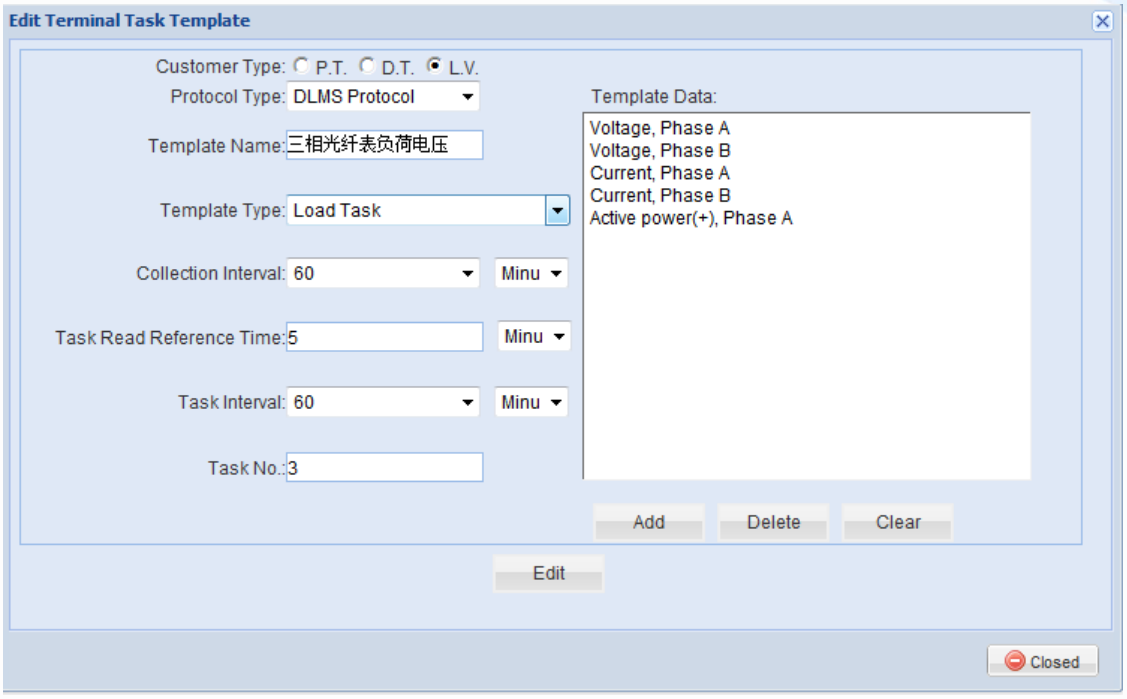


Figure 114 Modify DLMS Template Information

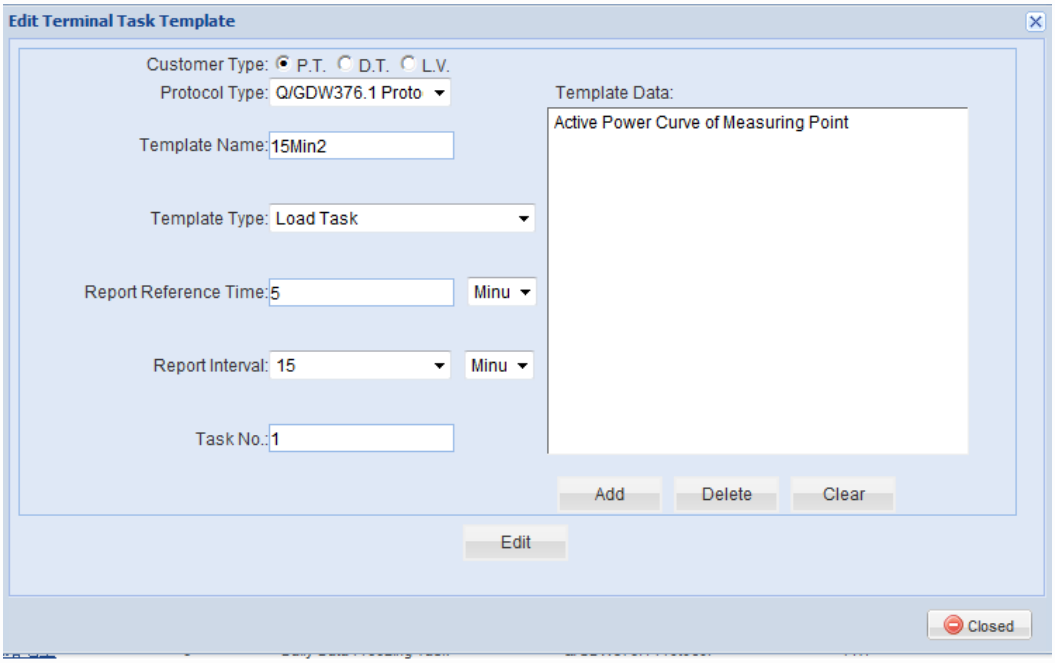


Figure 115 Modify China State Grid Protocol Template Information

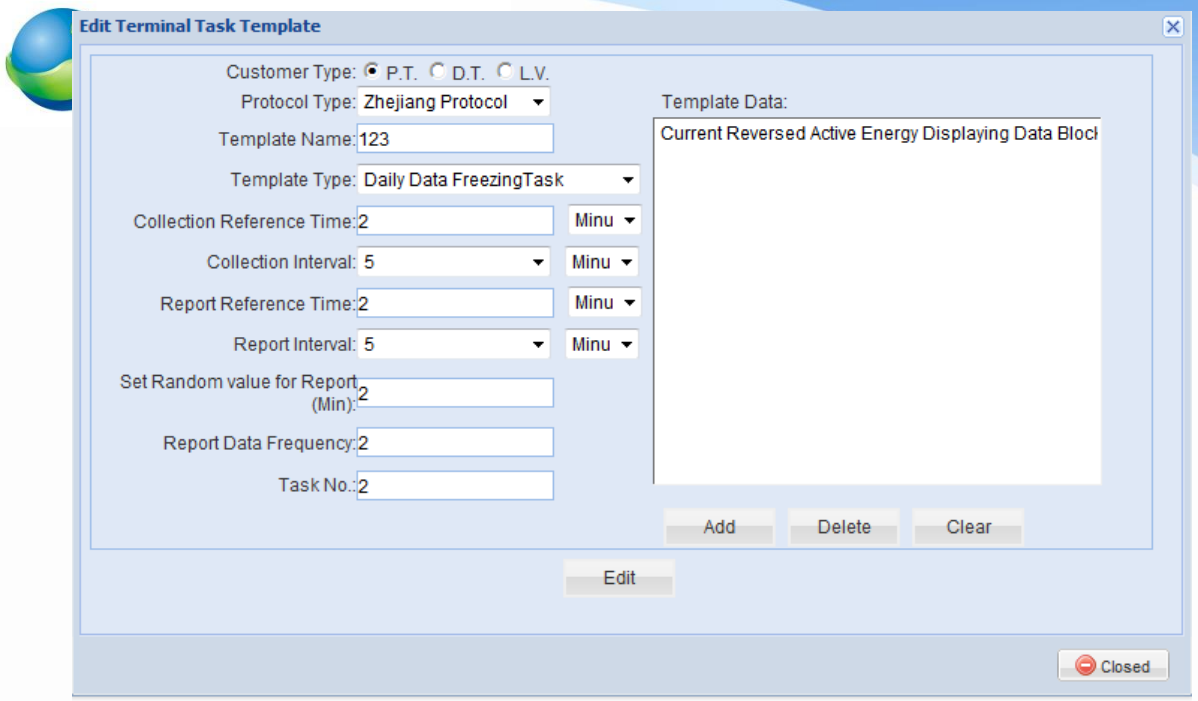


Figure 116 Modify Zhejiang Province Protocol Template Information

Click “Edit” button. If template modification is successful, it will prompt the successful message; and vice versa.

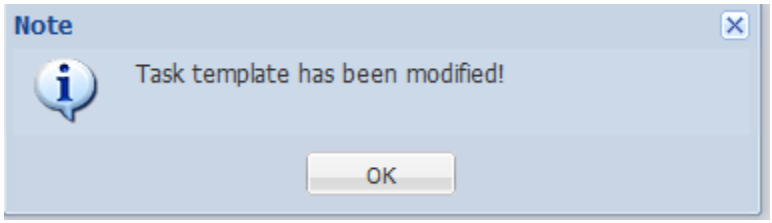


Figure 117 Modify Template Successfully

(3) Delete Terminal Template

Choose one template in the template list, click “Delete” button, and the confirmation dialog box will pop up. Please click “OK” button to delete the template, click “Cancel” button to return.

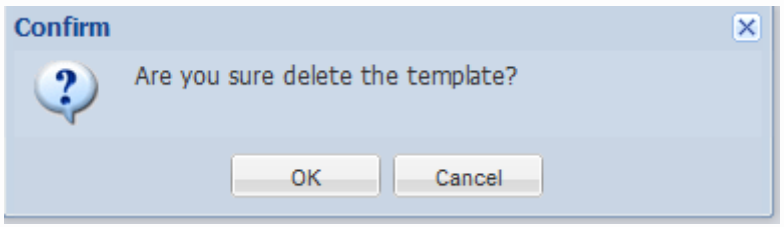


Figure 118 Confirm Deleting Template

Prompt messaging indicating deleting template successfully.

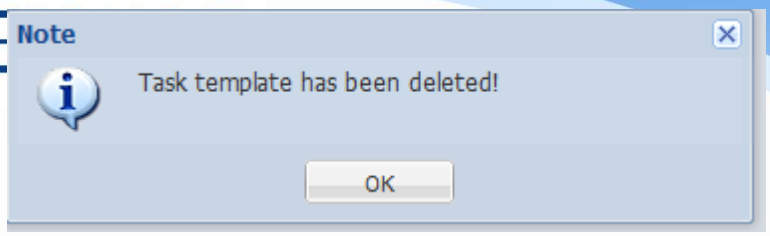


Figure 119 Task Template Delete Successfully

8.1.2. Master Station Task

1) Input query conditions: Customer Type, Protocol Type, Template Name, and click "Query" button. The system will show the query results in the list according to the query conditions.

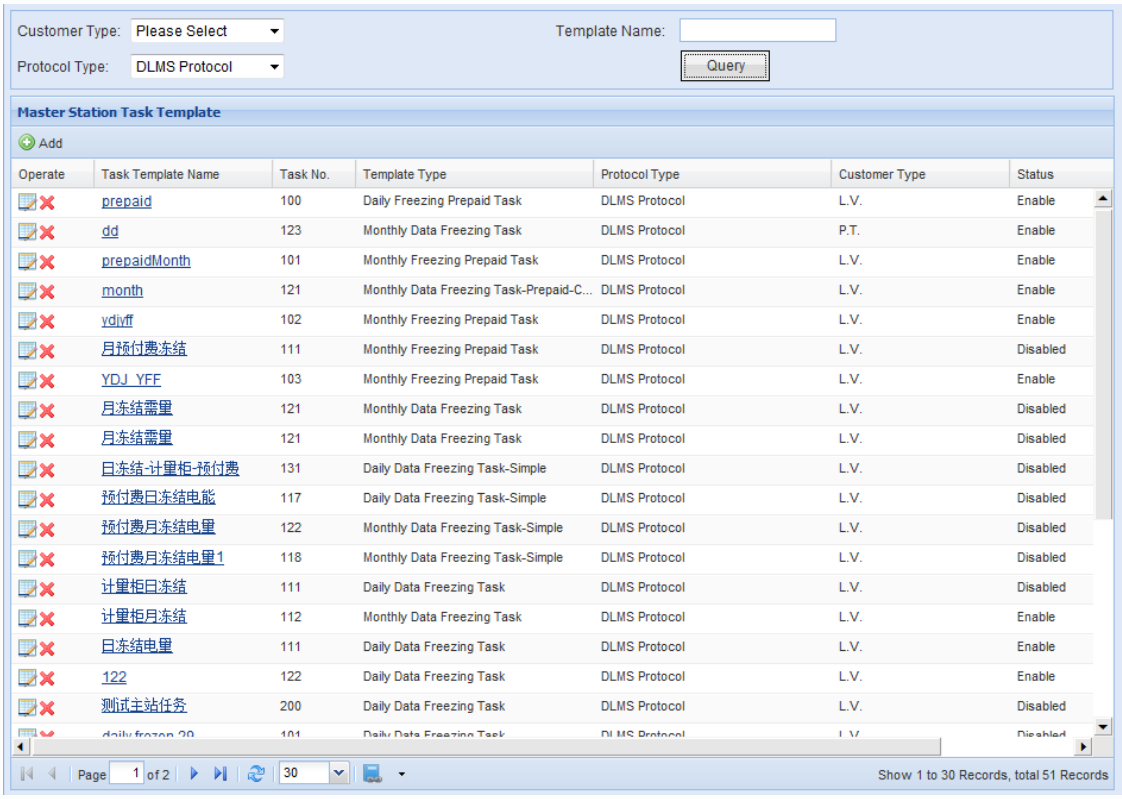

Customer Type: Please Select
Protocol Type: DLMS Protocol
Template Name:
Query
Master Station Task Template
Add
Operate | Task Template Name | Task No. | Template Type | Protocol Type | Customer Type | Status
prepaid | 100 | Daily Freezing Prepaid Task | DLMS Protocol | L.V. | Enable
dd | 123 | Monthly Data Freezing Task | DLMS Protocol | P.T. | Enable
prepaidMonth | 101 | Monthly Freezing Prepaid Task | DLMS Protocol | L.V. | Enable
month | 121 | Monthly Data Freezing Task-Prepaid-C... | DLMS Protocol | L.V. | Enable
ydivff | 102 | Monthly Freezing Prepaid Task | DLMS Protocol | L.V. | Enable
月预付费冻结 | 111 | Monthly Freezing Prepaid Task | DLMS Protocol | L.V. | Disabled
YDJ_YFF | 103 | Monthly Freezing Prepaid Task | DLMS Protocol | L.V. | Enable
月冻结需里 | 121 | Monthly Data Freezing Task | DLMS Protocol | L.V. | Disabled
月冻结需里 | 121 | Monthly Data Freezing Task | DLMS Protocol | L.V. | Disabled
日冻结-计里柜-预付费 | 131 | Daily Data Freezing Task-Simple | DLMS Protocol | L.V. | Disabled
预付费日冻结电能 | 117 | Daily Data Freezing Task-Simple | DLMS Protocol | L.V. | Disabled
预付费月冻结电里 | 122 | Monthly Data Freezing Task-Simple | DLMS Protocol | L.V. | Disabled
预付费月冻结电里1 | 118 | Monthly Data Freezing Task-Simple | DLMS Protocol | L.V. | Disabled
计里柜日冻结 | 111 | Daily Data Freezing Task | DLMS Protocol | L.V. | Disabled
计里柜月冻结 | 112 | Monthly Data Freezing Task | DLMS Protocol | L.V. | Enable
日冻结电里 | 111 | Daily Data Freezing Task | DLMS Protocol | L.V. | Enable
122 | 122 | Daily Data Freezing Task | DLMS Protocol | L.V. | Enable
测试主站任务 | 200 | Daily Data Freezing Task | DLMS Protocol | L.V. | Disabled
Page 1 of 2
30
Show 1 to 30 Records, total 51 Records

Figure 120 Task Template Delete Successfully

2) Click "Add" button to enter the management interface of Master Station Task Template.

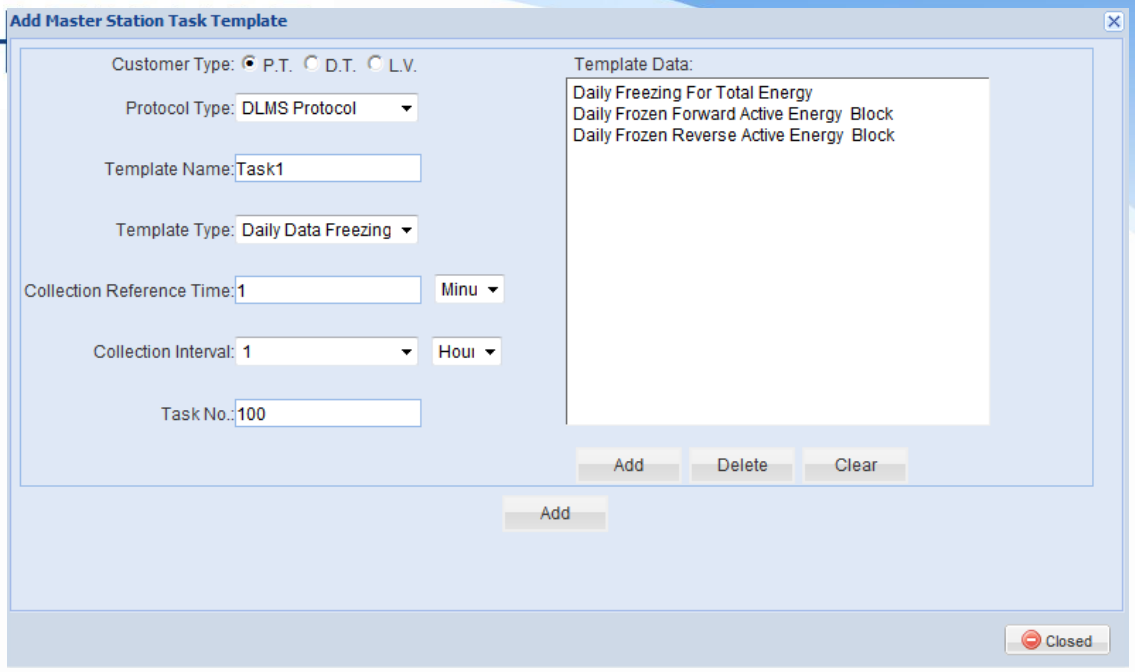


Figure 121 Add New DLMS Master Station Task

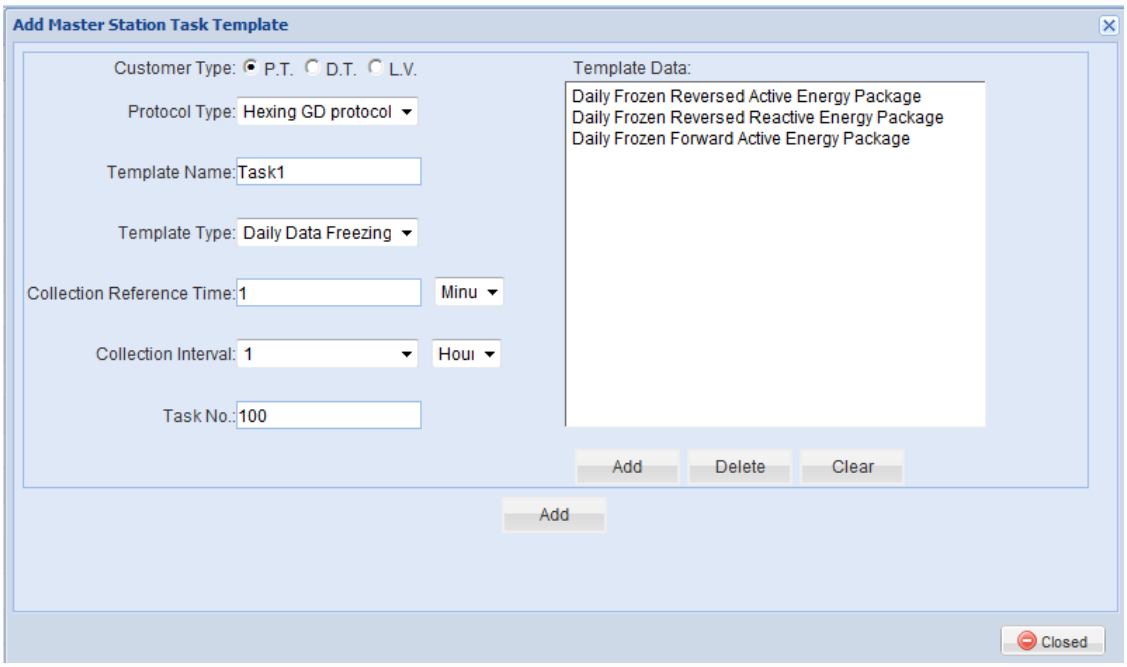


Figure 122 Add New Guangzhou Protocol Master Station Task

Click “Add” button. If adding is successful, prompt message showing successful adding will appear; if failed, prompt message showing adding failed will appear.

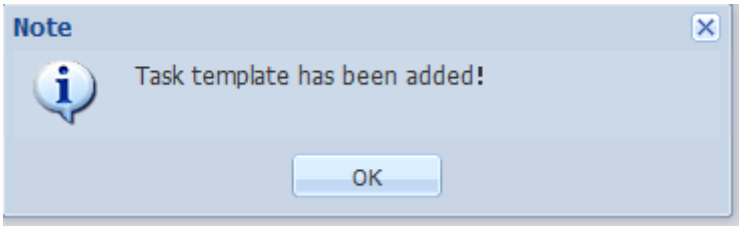


Figure 123 Master Station Task Adding Successful

3) Modify Master Station Task Template

Choose one template in the template list, click "Edit" button to enter the management interface of Modify Terminal Task Template. Then input the template information that needs to modify.

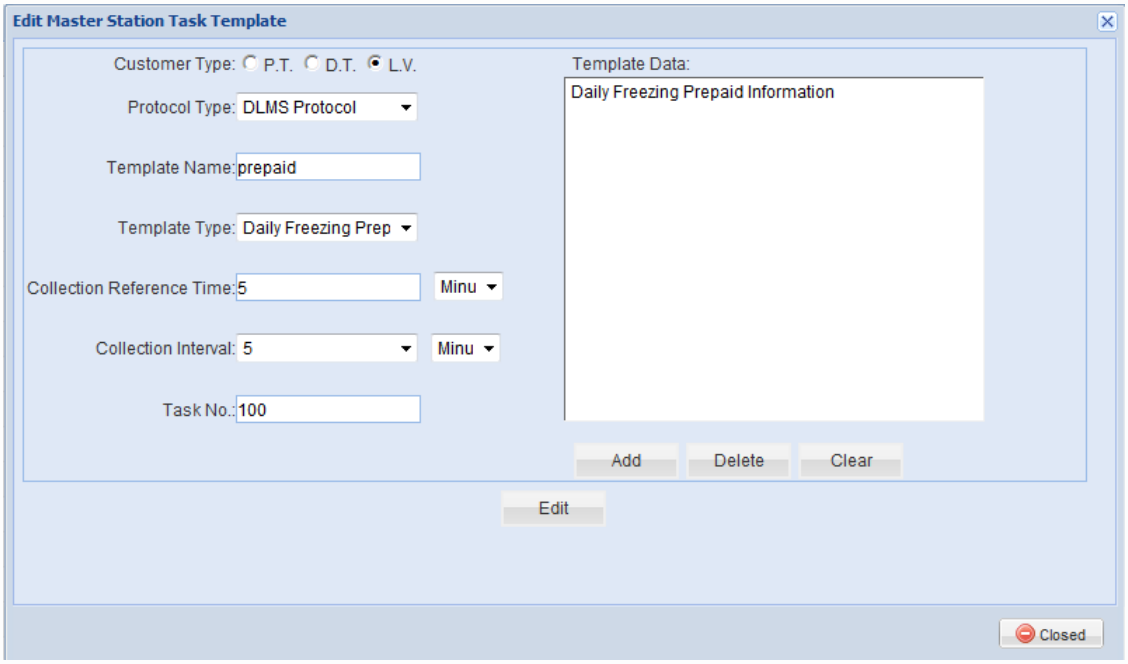


Figure 124 DLMS Master Station Task Modification

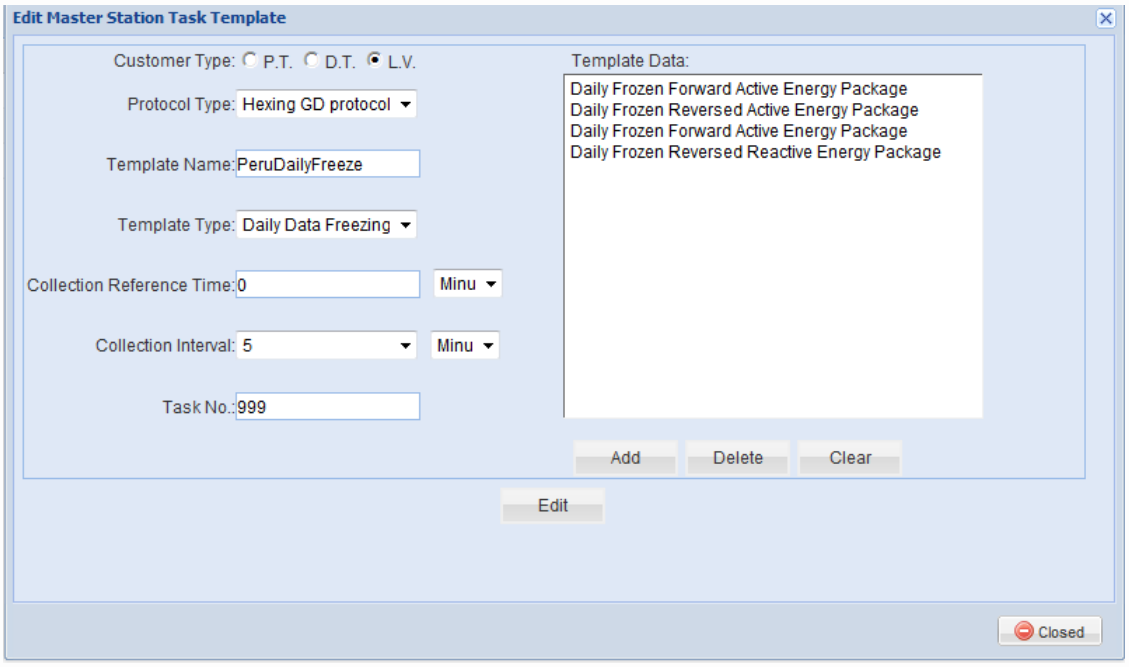


Figure 125 Guangzhou Protocol Master Station Task Modification

Click "Edit" button. If modification is successful, prompt message showing successful modification will appear; if failed, prompt message showing modification failed will

appear.

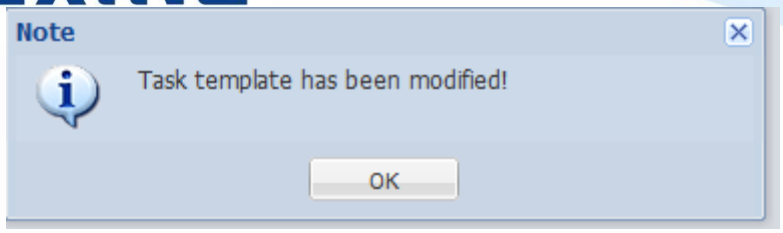


Figure 126 Modify Master Station Task Successfully

(4) Delete Master Station Task

Choose one template in the master station template list, click “Delete” button, and the confirmation dialog box will pop up. Please click “OK” button to delete the template, click “Cancel” button to return.

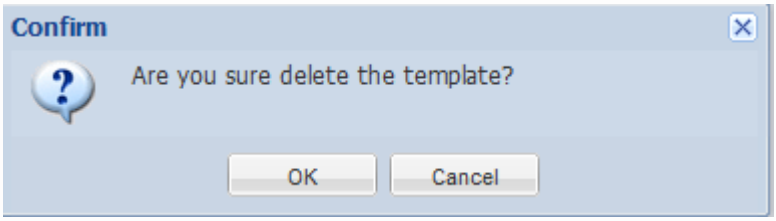


Figure 127 Confirm to Delete Template

Prompt messaging indicating deleting template successfully.

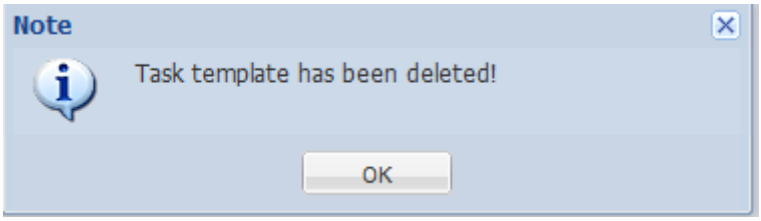


Figure 128 Delete Master Station Task Template Successfully

8.2. Terminal Default Task

[Menu] Basic> Task Management> Default Task

[Function] Default Task

[Step]

Query Default Task:

Choose “Subscribe Type, Terminal Type”, and click “Query” button.

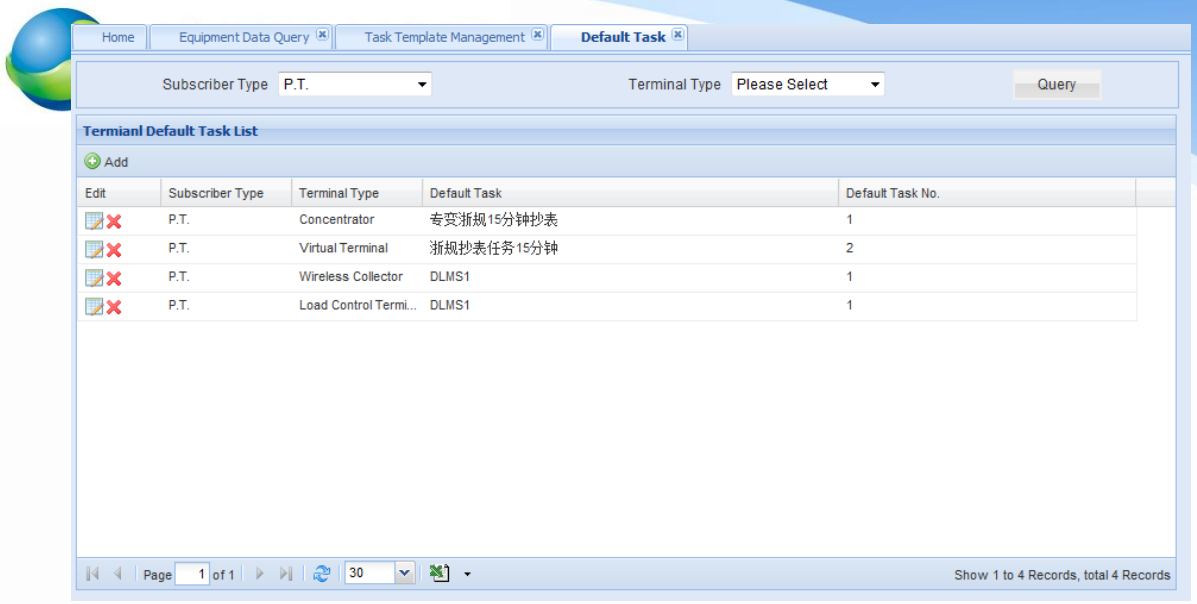


Figure 129 Terminal Default Task Query List

Add new default task:

Click “Add” button in the Query Interface, choose “Subscribe Type, Terminal Type”, choose “Task Template”, and click “Save” button. In the “Task Related Template” interface, the “Add” button is for adding one task template, the “Delete” button is for deleting one task template.

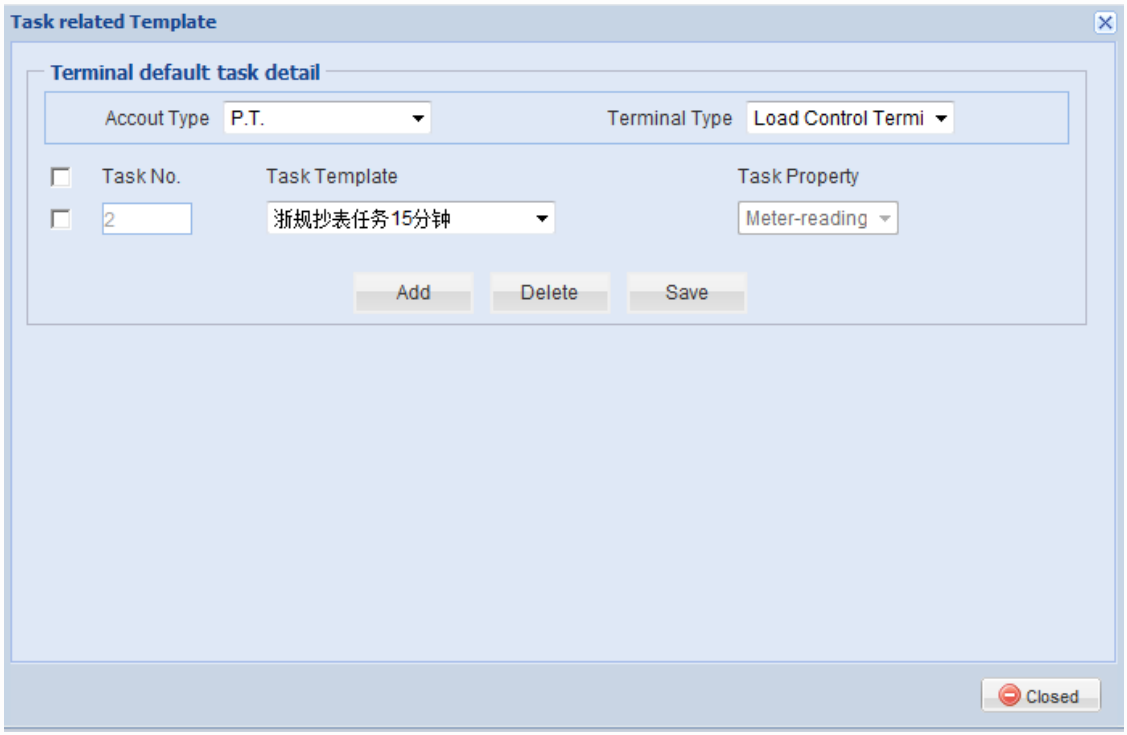


Figure 130 Add New Task Template

8.3. Terminal Task Management-Management of Terminal Task

[Menu] Basic> Task Management> Task Management

[Function] Terminal Task Management

[Step]

(1) Query Customer List

1. Click the equipment node, the equipment information will be shown in the "Alternative Customer List".
2. Click the node above equipment, choose "Power Utility, Protocol Type, Customer Type, Task Status, Task No, and Task Temple", select "Issue Task Template", and click "Query" button to check the customer list.

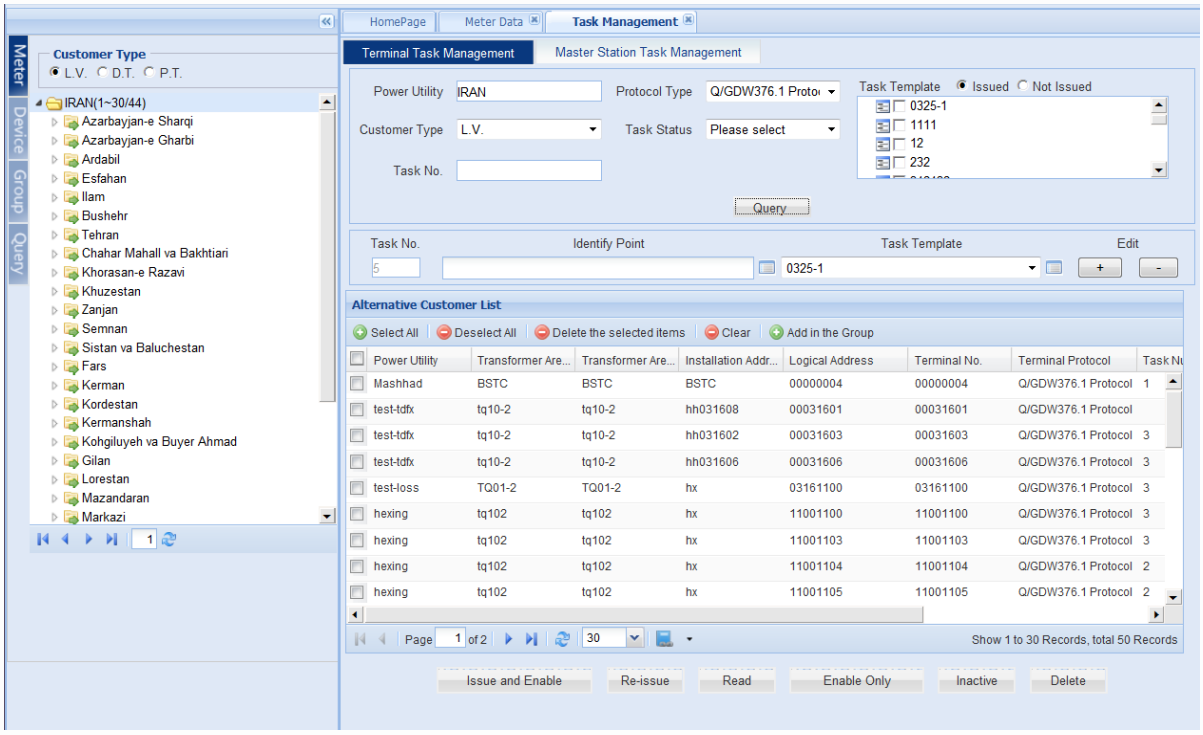


Figure 131 Customer List

(2) Issue Terminal Task

Choose customers which need to issue in the Alternative Subscribe List. Choose the task template which needs to issue in task template. Click "+" in Edit column to add task template, and click "-" to delete the task template. Click "Issue and Enable", input "Issue and Enable to Use Time", and click "OK" button to issue the task. Click "Cancel"

button to return to this interface.

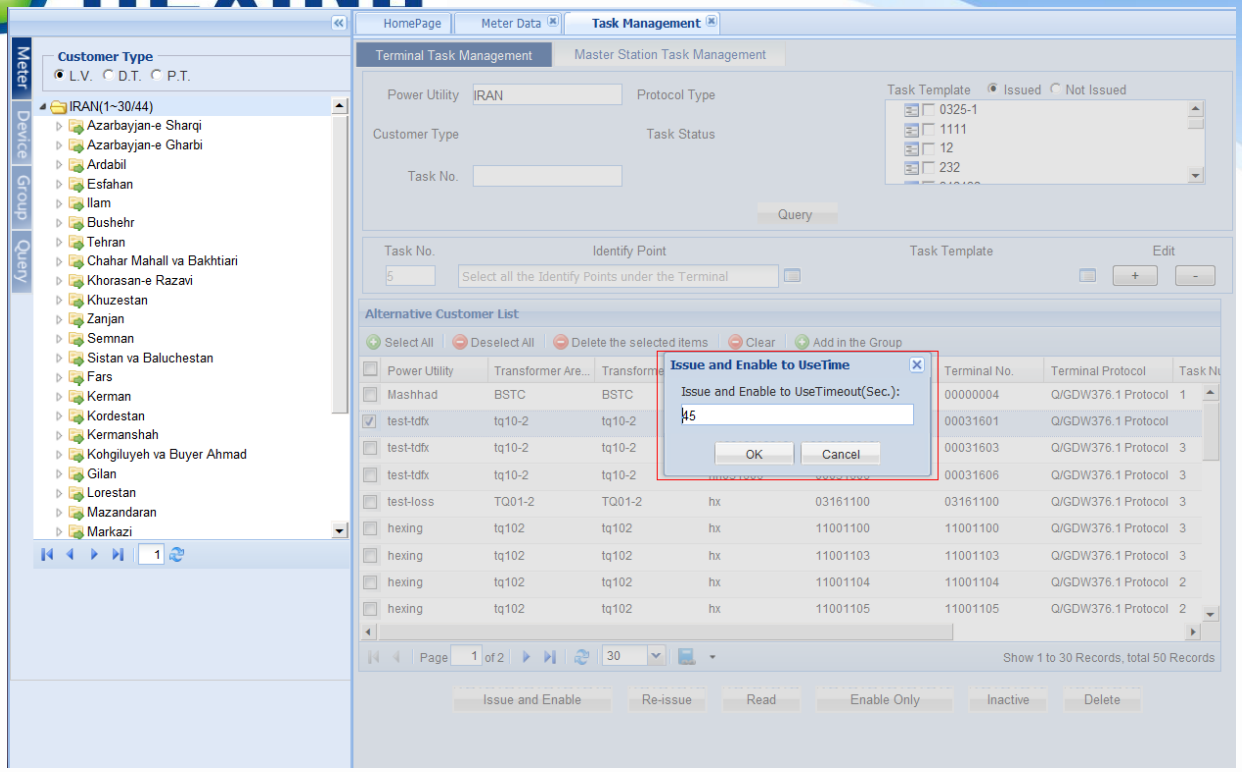


Figure 132 Prepare for Inssuing Task

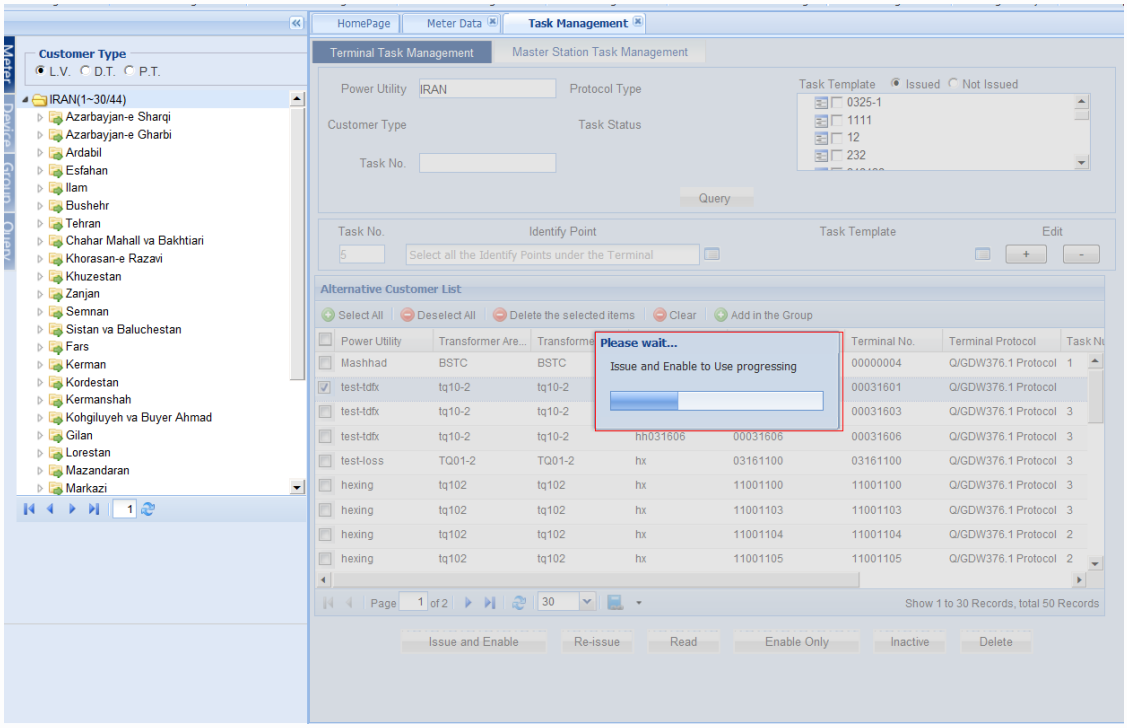


Figure 133 Issuing Task

If time is out during task issuance, it will return a timeout interface. Click “OK” button and the “Detailed Information of Operation Result” interface will be shown. If the task is issued successfully, it will directly show the “Detailed Information of Operation

Result" interface.

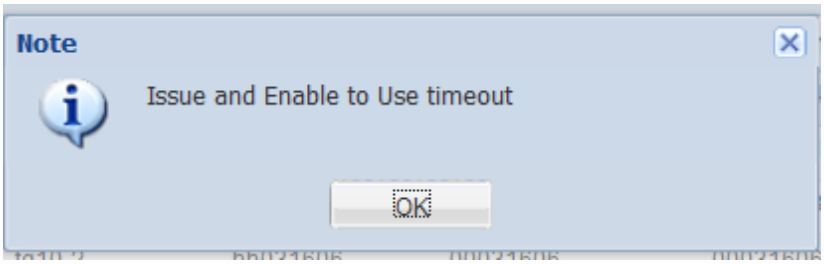


Figure 134 Issue Task Timeout

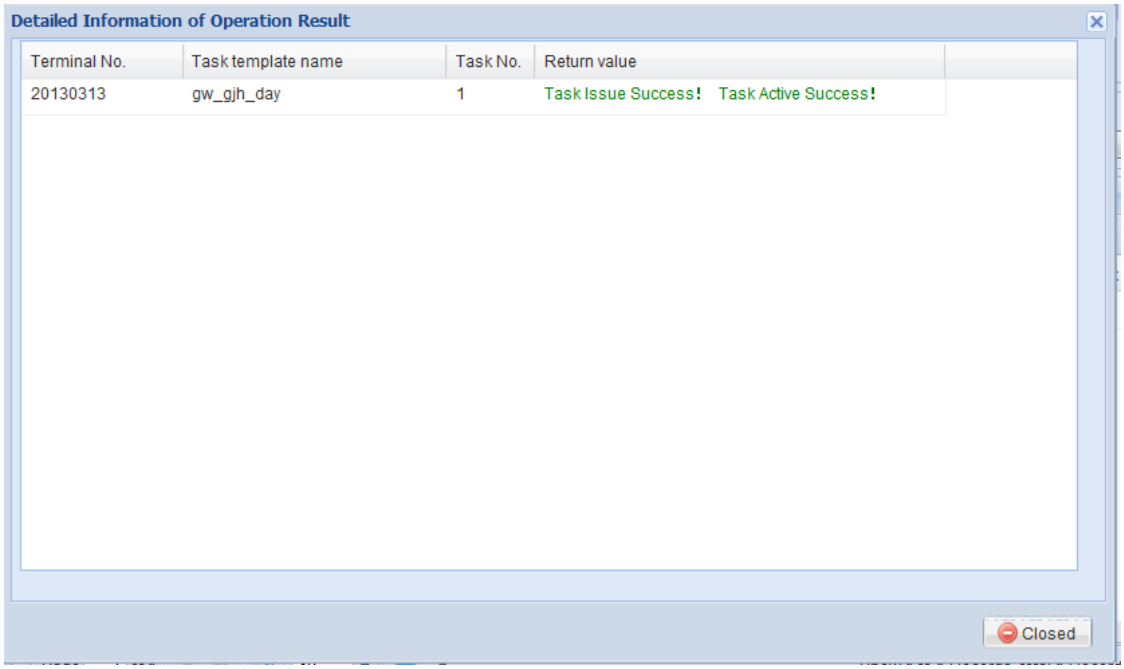


Figure 135 Task Setting Result

(3) Re-issue Terminal Task

Directly click "Re-issue" button, input "Re-issue Time", and click "OK" to issue the task. Click "Cancel" to return to the current interface.

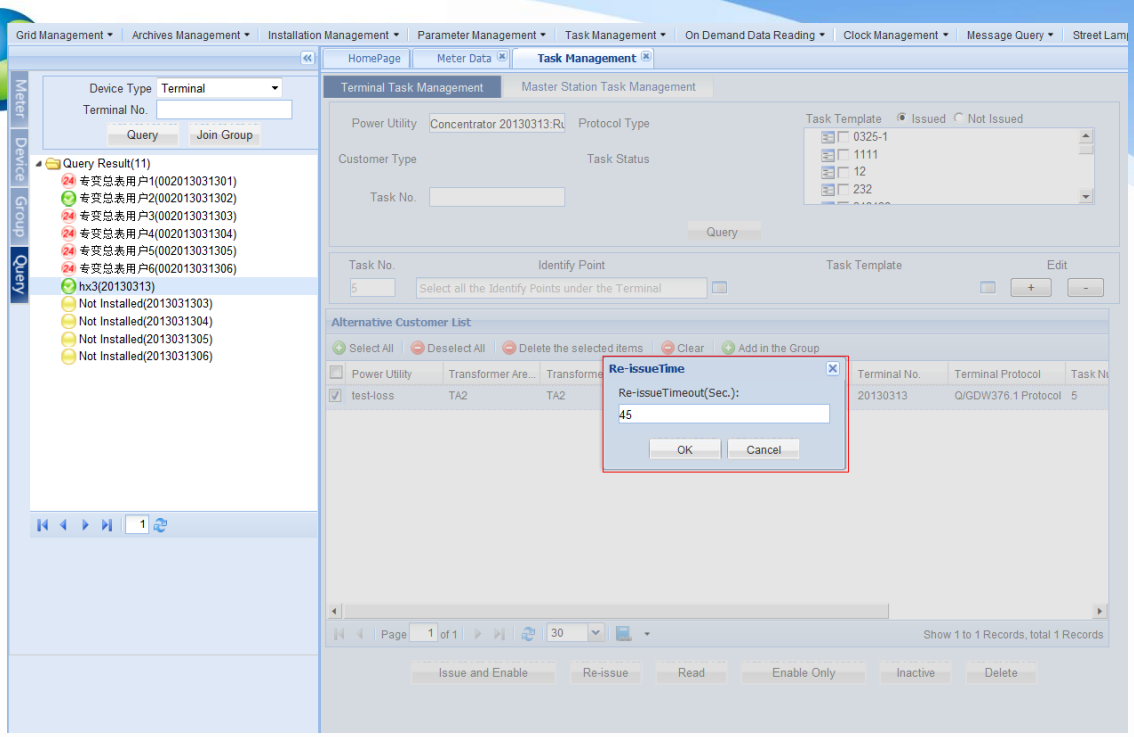


Figure 136 Prepare for Re-issuing Task

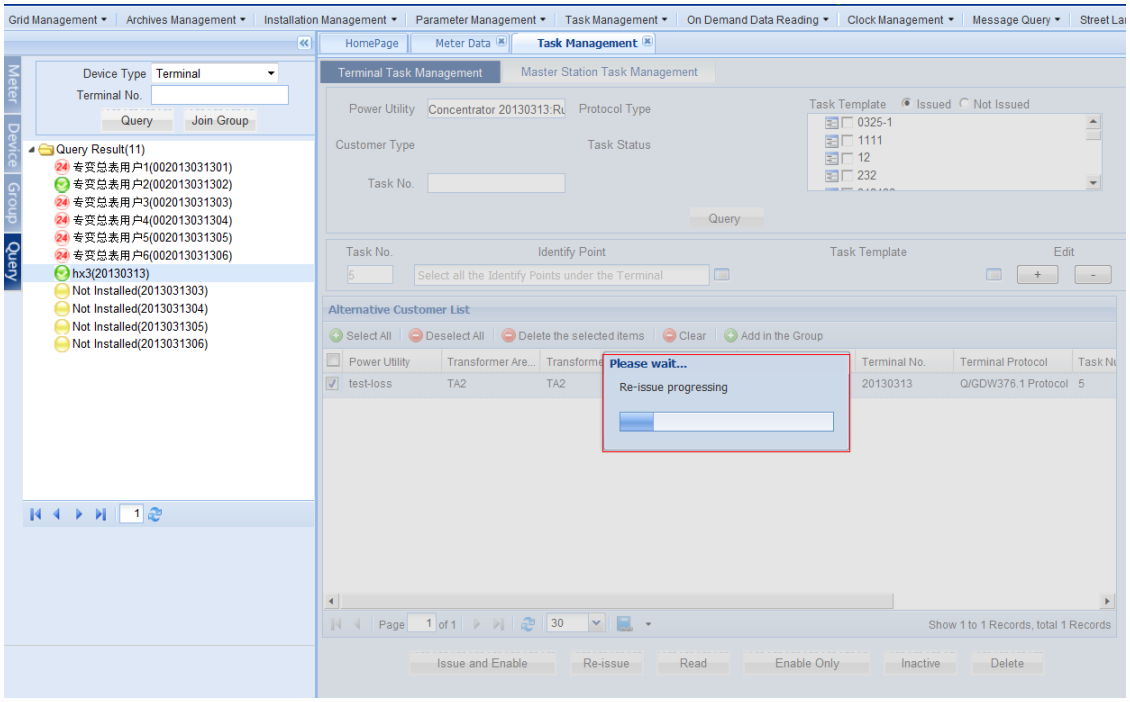


Figure 137 Task Re-issuing

If time is out during task re-issuance, it will return a timeout interface. Click “OK” button and the “Detailed Information of Operation Result” interface will be shown. If the task is re-issued successfully, it will directly show the “Detailed Information of Operation Result” interface.

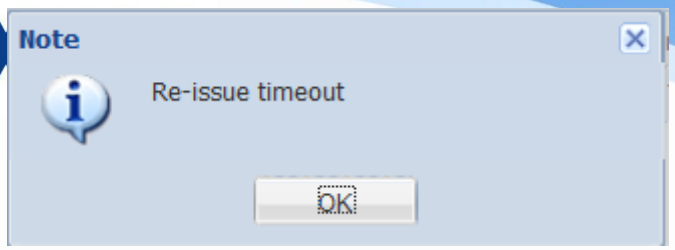


Figure 138 Re-issue Task Timeout

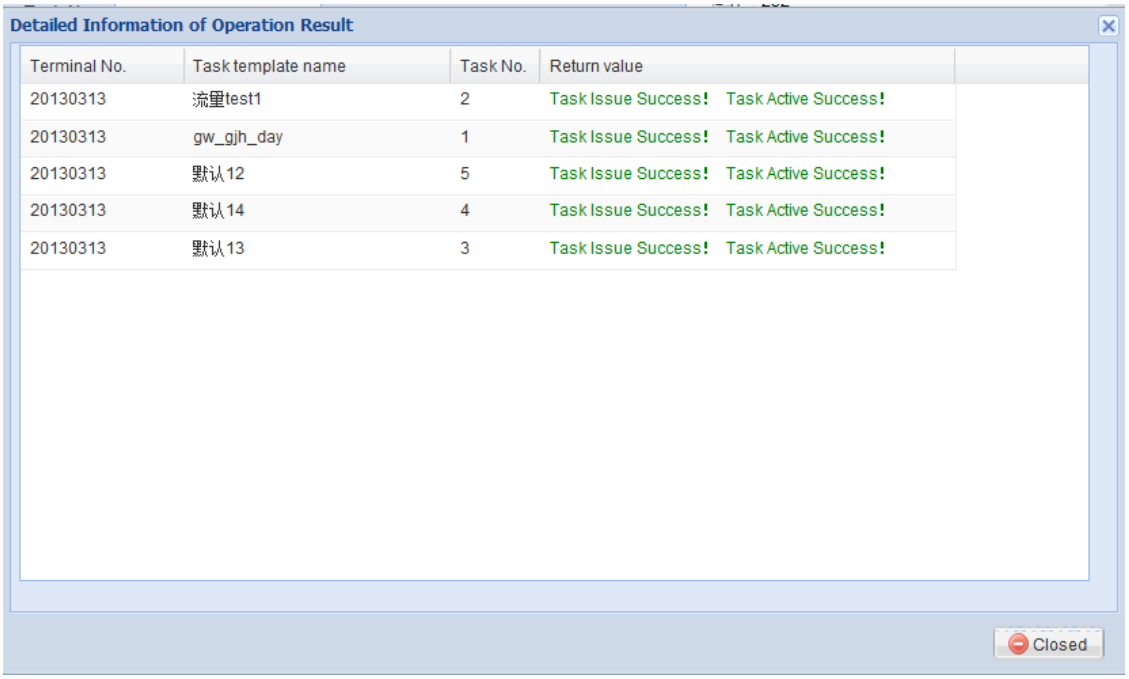

Detailed Information of Operation Result
Terminal No.
Task template name
Task No.
Return value
20130313 流量test1 2 Task Issue Success! Task Active Success!
20130313 gw_gjh_day 1 Task Issue Success! Task Active Success!
20130313 默认12 5 Task Issue Success! Task Active Success!
20130313 默认14 4 Task Issue Success! Task Active Success!
20130313 默认13 3 Task Issue Success! Task Active Success!
Closed

Figure 139 Re-issue Task Result

(4) Reading Terminal Task

Choose Reading Customer in the Alternative Subscribe List. Click “Read” button and the interface for choosing task number will pop up. In this interface, task numbers which have been used by this terminal will be shown.

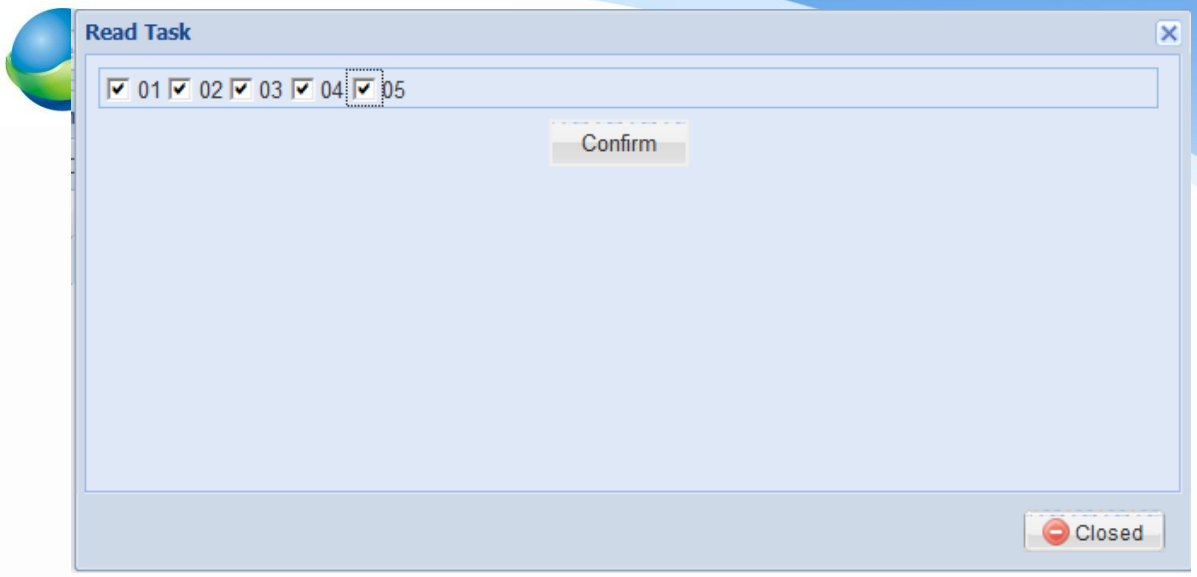


Figure 140 Choose Task Number

Choose the Task No that needs to read and click “confirm” button. Then the “Read Time” interface will pop up. Input the “Read TimeOut time” and click “OK” button to start reading the task.

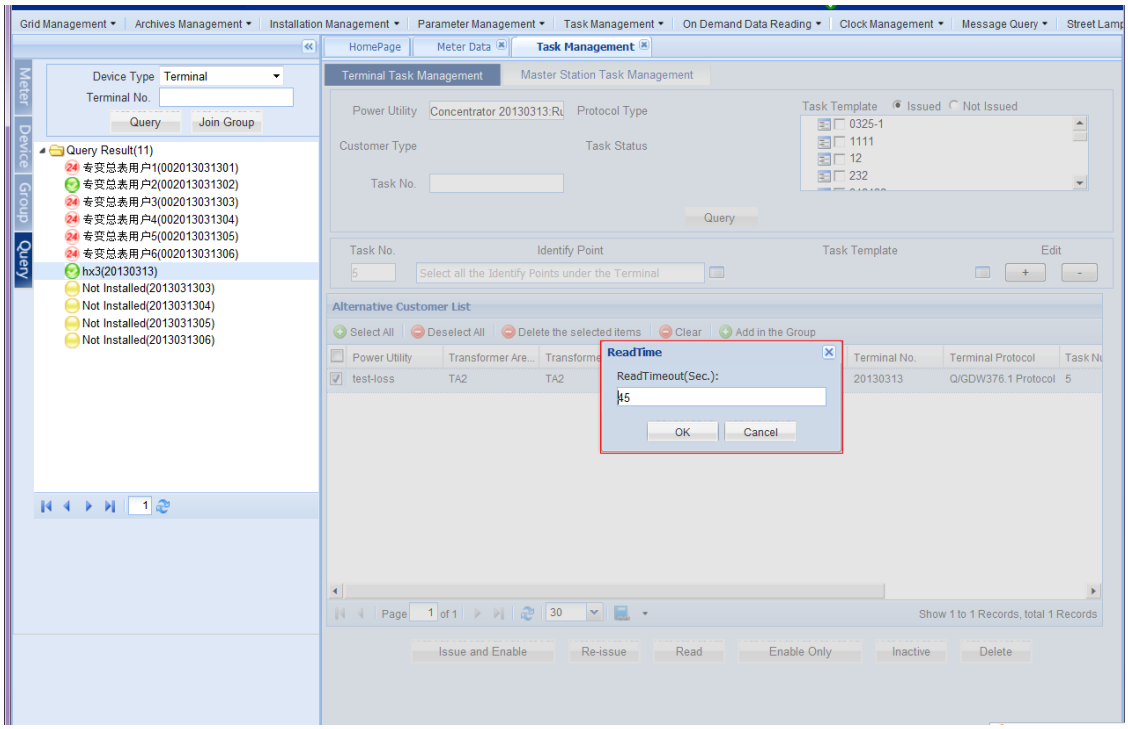


Figure 141 Prepare for Reading Task

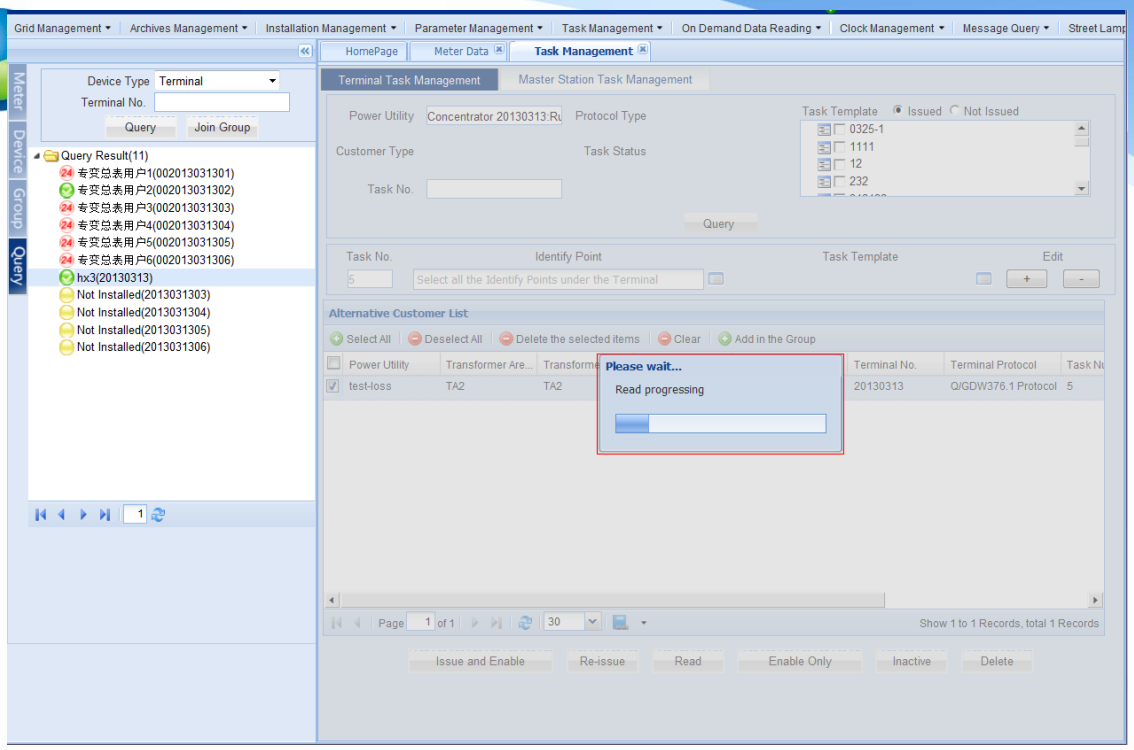


Figure 142 Reading Task

If time is out during task reading, it will display "Read TimeOut". Click "OK" button and the "Task Reading Result" interface will be shown. If it is successful, it will shift to "Task Reading Result" interface directly.

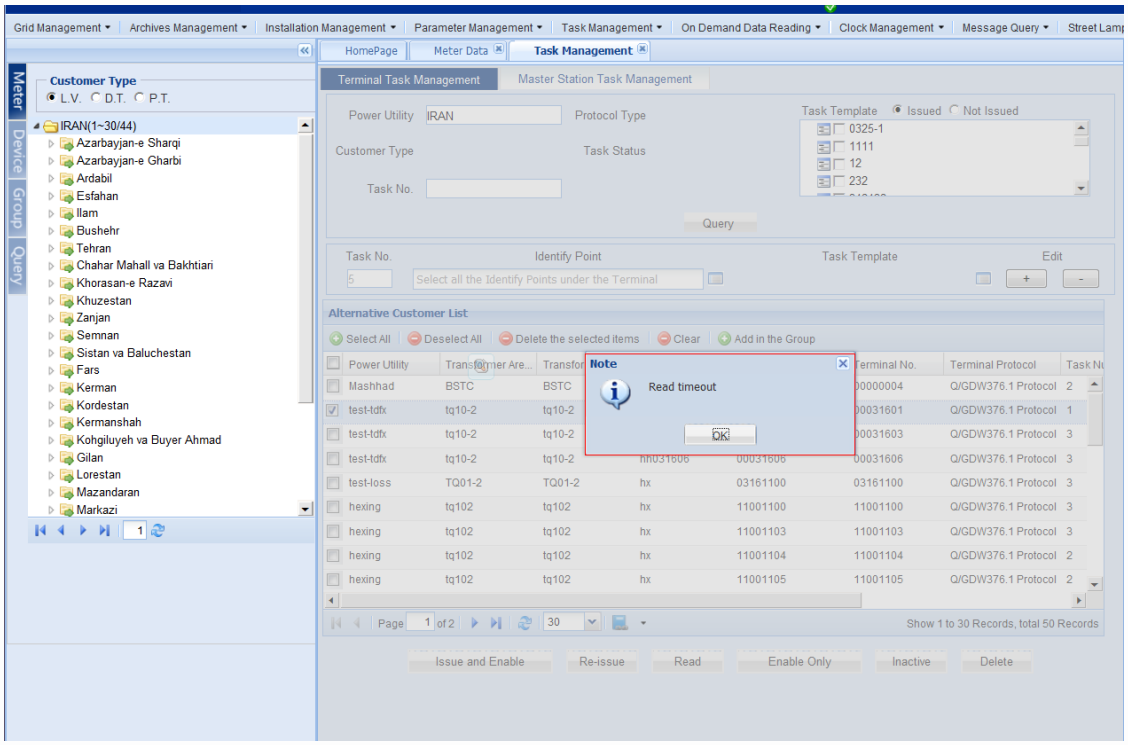


Figure 143 Reading Timeout

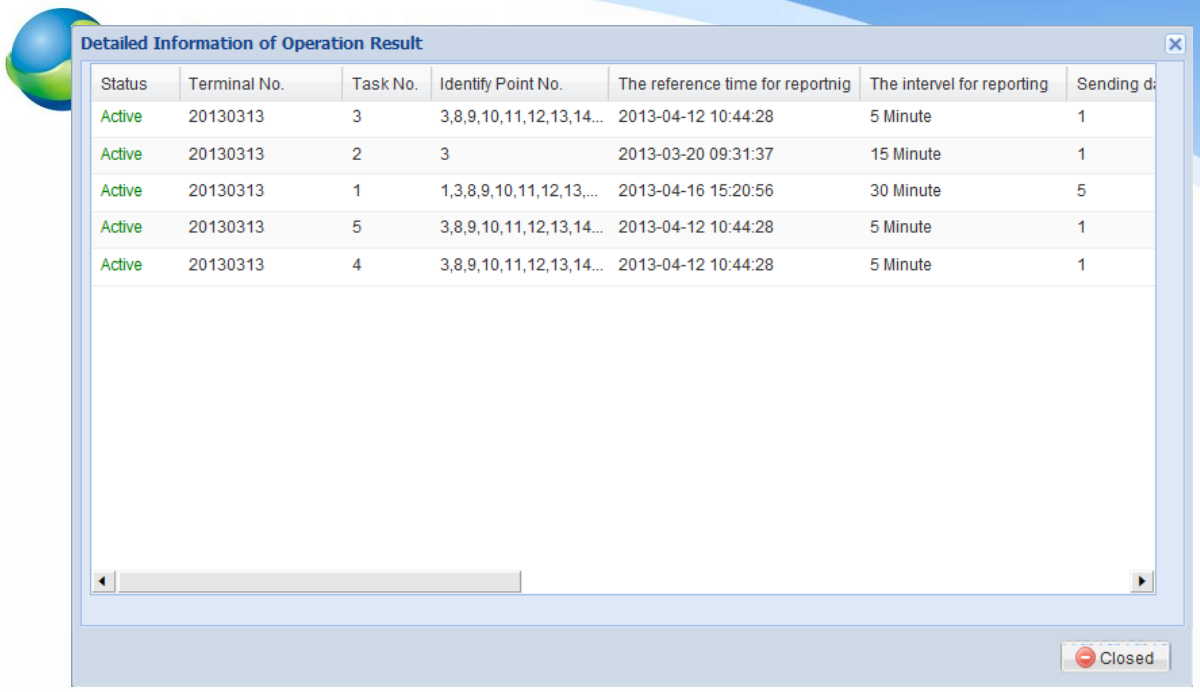

Detailed Information of Operation Result
Status
Terminal No.
Task No.
Identify Point No.
The reference time for reportnig
The intervel for reporting
Sending d
Active 20130313 3 3,8,9,10,11,12,13,14... 2013-04-12 10:44:28 5 Minute 1
Active 20130313 2 3 2013-03-20 09:31:37 15 Minute 1
Active 20130313 1 1,3,8,9,10,11,12,13,... 2013-04-16 15:20:56 30 Minute 5
Active 20130313 5 3,8,9,10,11,12,13,14... 2013-04-12 10:44:28 5 Minute 1
Active 20130313 4 3,8,9,10,11,12,13,14... 2013-04-12 10:44:28 5 Minute 1
Closed

Figure 144 Reading Result

(5) Stop Terminal Task:

Choose the task which needs to be stopped in the Alternative Subscribe List and click "Inactive" button. Choose the task number that needs to be stopped. Here it only shows the task number which is being used. Click "Confirm".

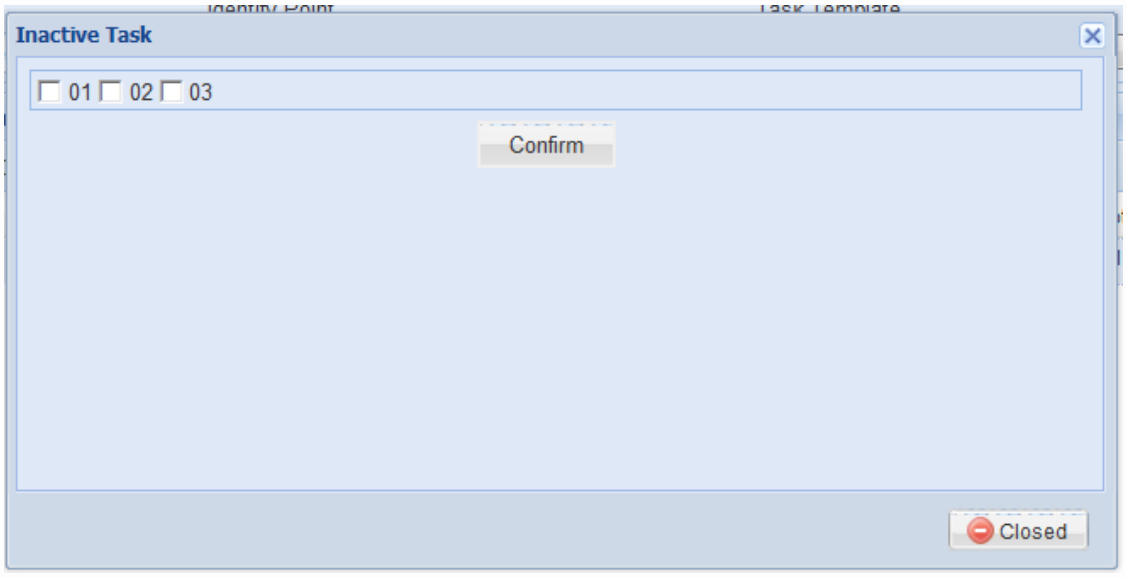


Figure 145 Choose the Task Number to Stop

There will be a prompt message asking if customer confirms to stop the selected task. Click "OK" to stop the task, and click "Cancel" to return to current interface.

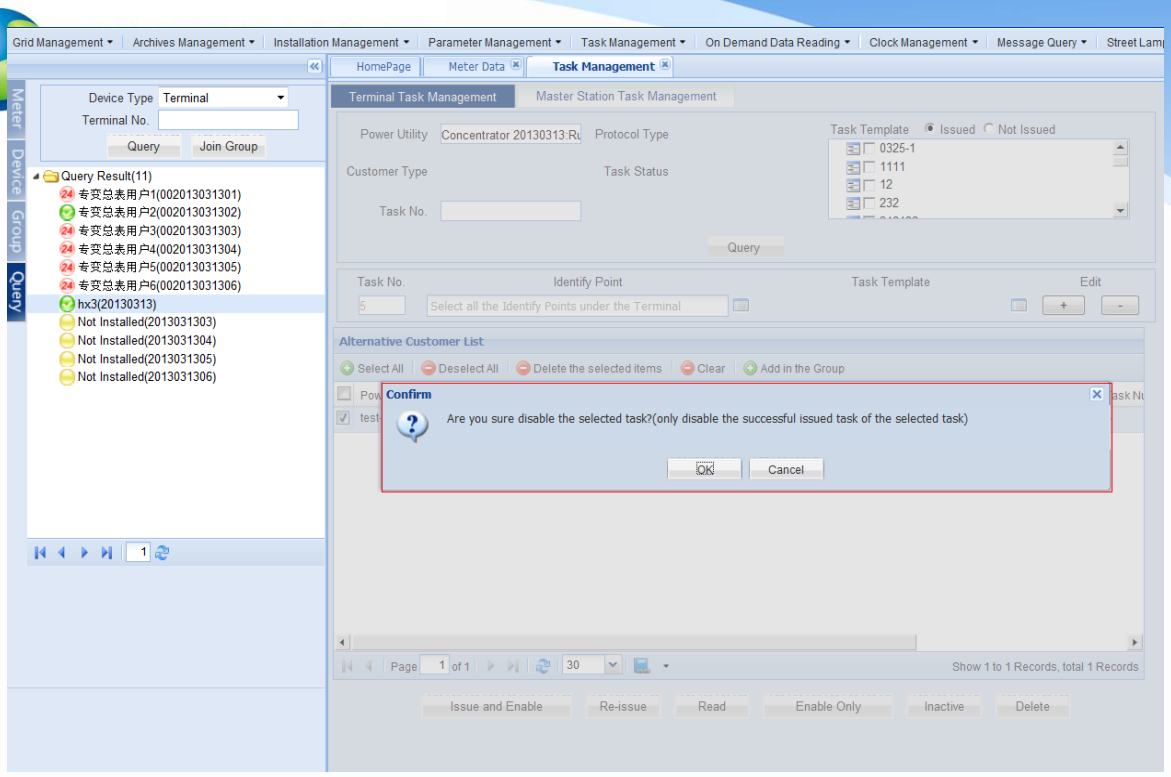


Figure 146 Confirm to Stop the Task

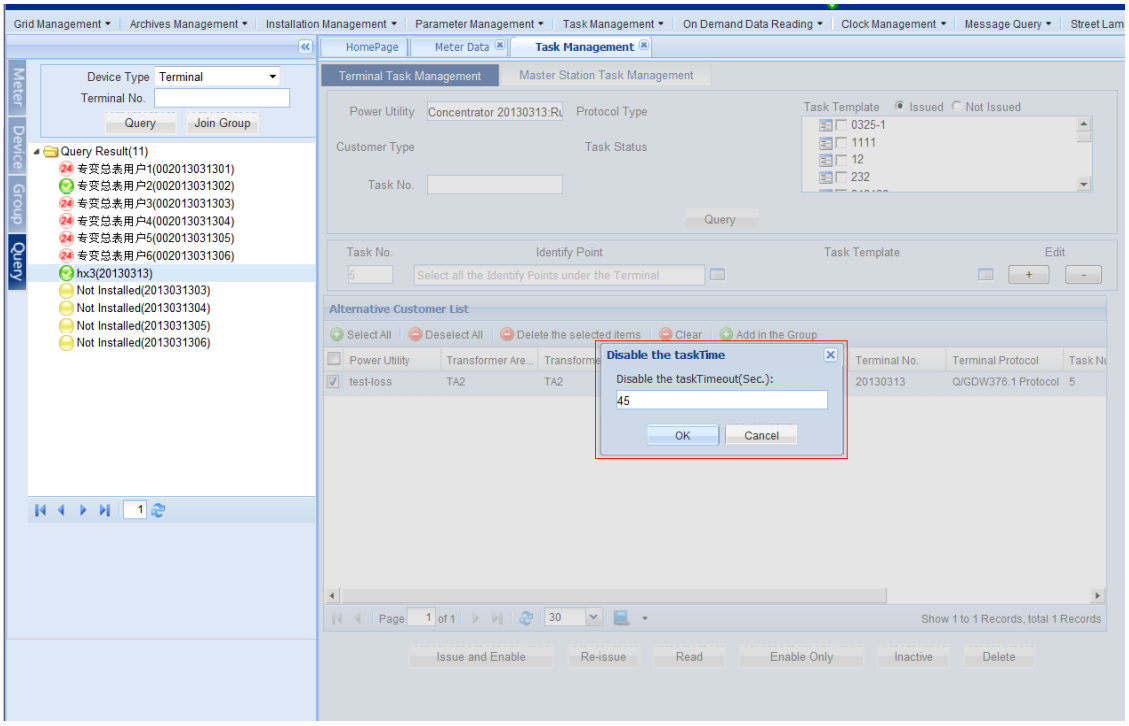


Figure 147 Set Timeout Time

Input “Disable the task Timeout”, and click “OK” button to start stopping the task.

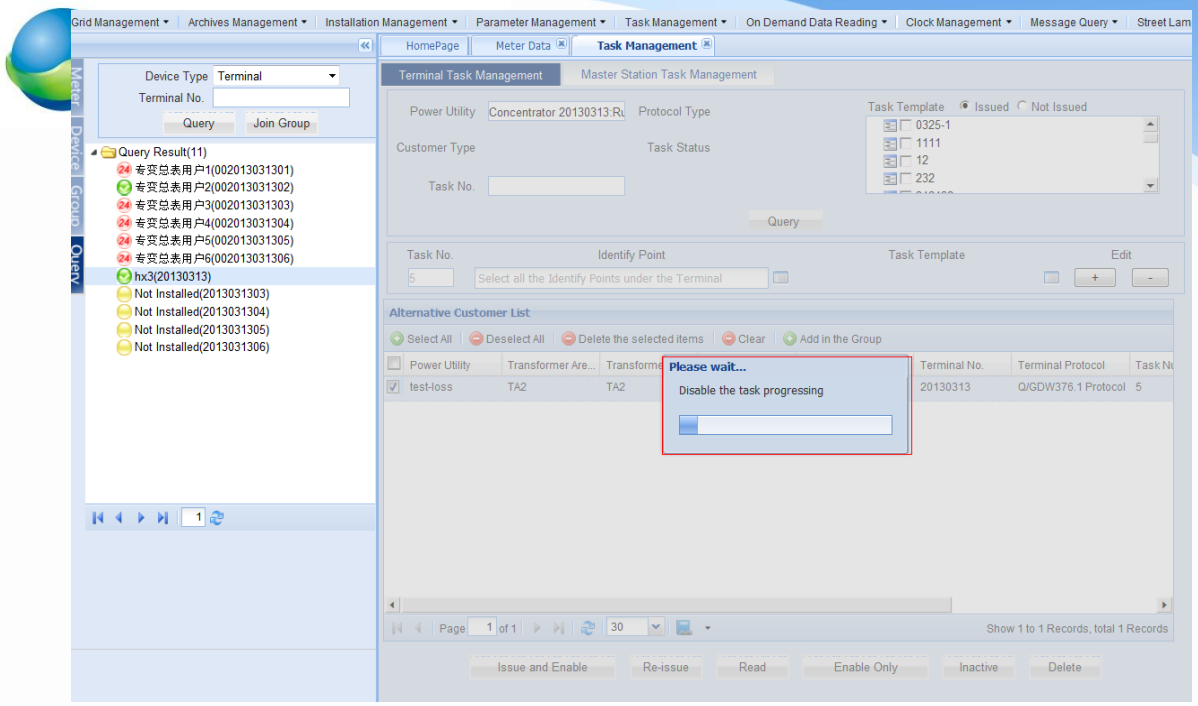


Figure 148 Stopping Task

The result will be returned. If it is stopped successfully, refresh Alternative Subscribe List, and the stopped task number will be shown in Inactive Tasks list.

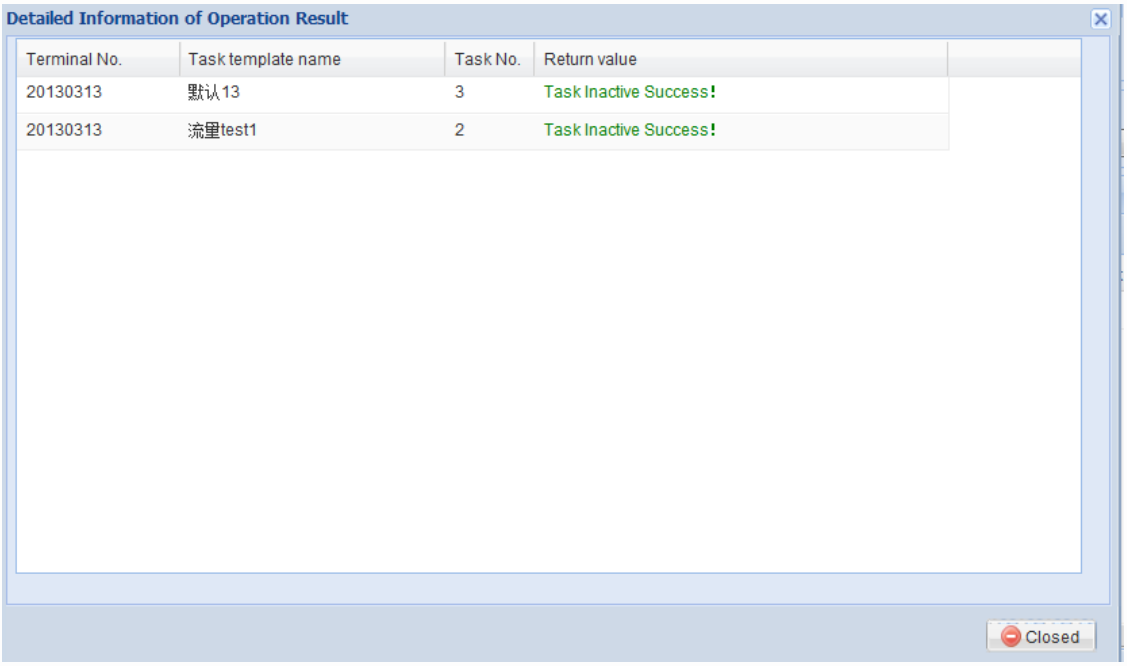


Figure 149 Return Stopping Task Result

(6) Delete Terminal Task

Choose the equipment in the Alternative Subscribe List, and click “Delete” button. Here it only shows the task number that is already stopped. If the task is still in operation status, you need to stop the task first then delete it.

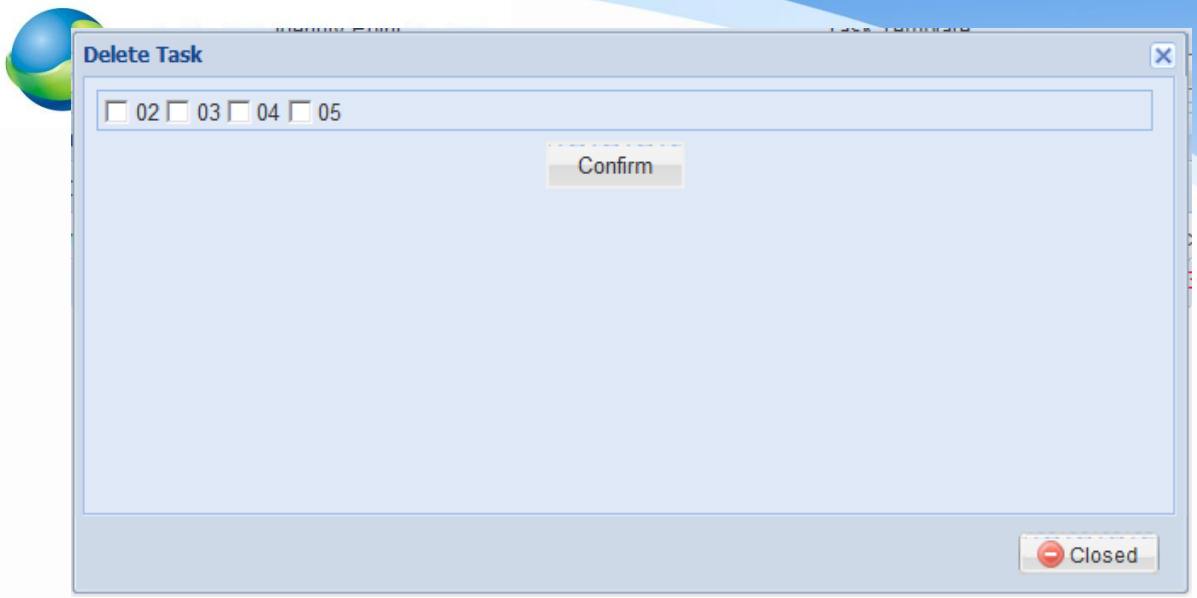


Figure 150 Choose the Task No to be Delete

Click “Confirm” button, it will prompt message asking the customer to confirm whether to delete the selected task or not.

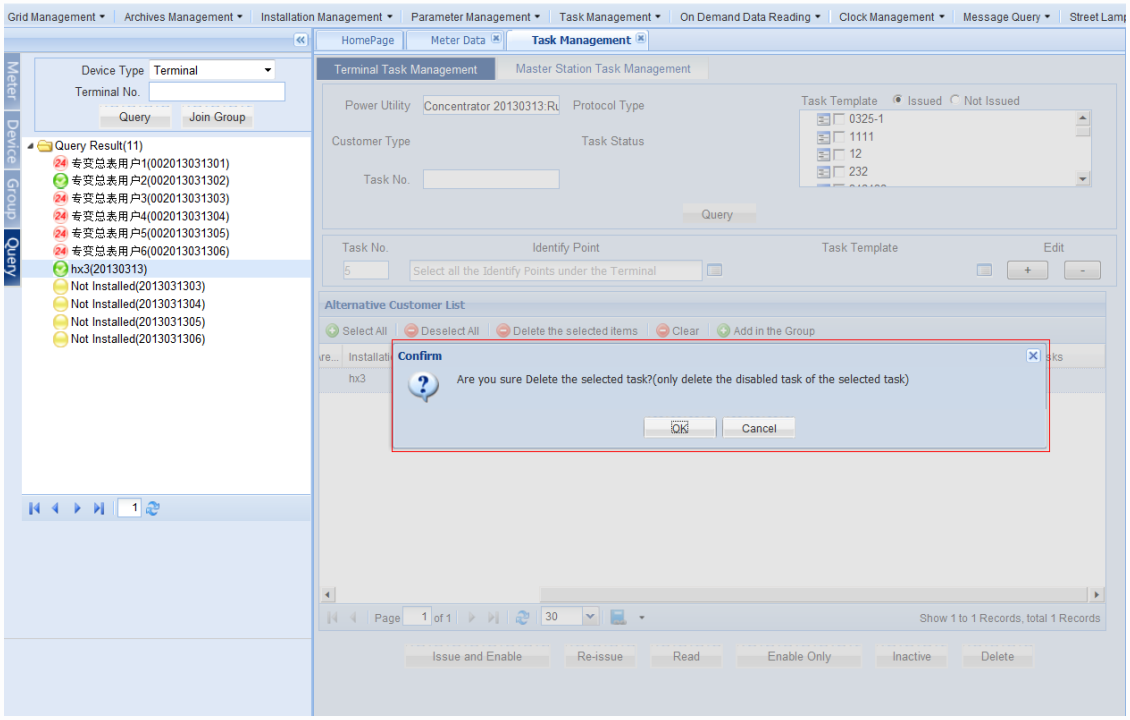


Figure 151 Confirm to Delete Task

Click “OK” to delete the selected task; click “Cancel” to return to current interface.

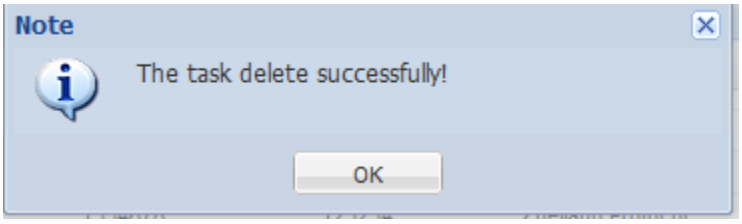


Figure 152 Delete Task Successfully

8.4. Terminal Task Management-Management of Master Station Task

[Menu] Basic> Task Management> Task Management

[Function] Master Station Task Management

[Step]

(1) Query Customer List

1. Click the equipment node, the equipment information will be shown in the "Alternative Customer List".
2. Click the node above equipment, choose "Power Utility, Protocol Type, Customer Type, Task Status, Task No, and Task Temple", select "Issue Task Template", and click "Query" button to check the customer list.

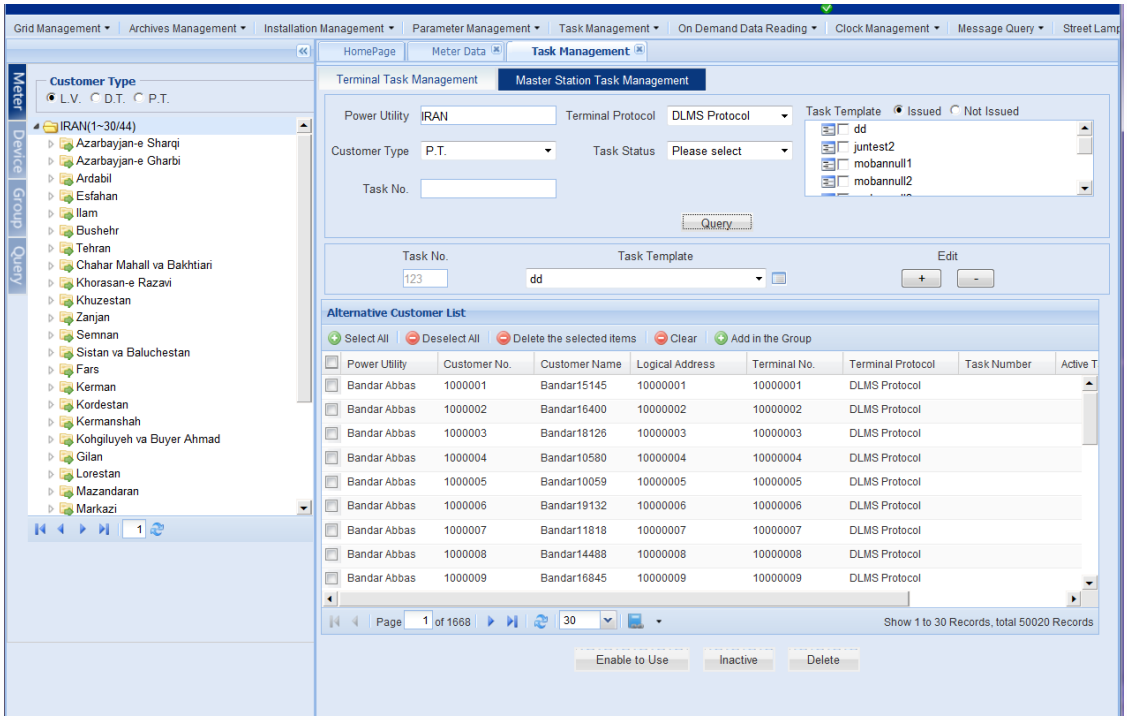


Figure 153 Customer List

(2) Enable Task

Choose customers which need to issue in the Alternative Subscribe List. Choose the task template which needs to issue in task template. Click "+" in Edit column to add task template, and click "-" to delete the task template. Click "Enable to Use", and it will pop up a prompt dialog box asking whether to enable the master station task. Click

"OK" button to enable the task. Click "Cancel" button to return to the current interface.

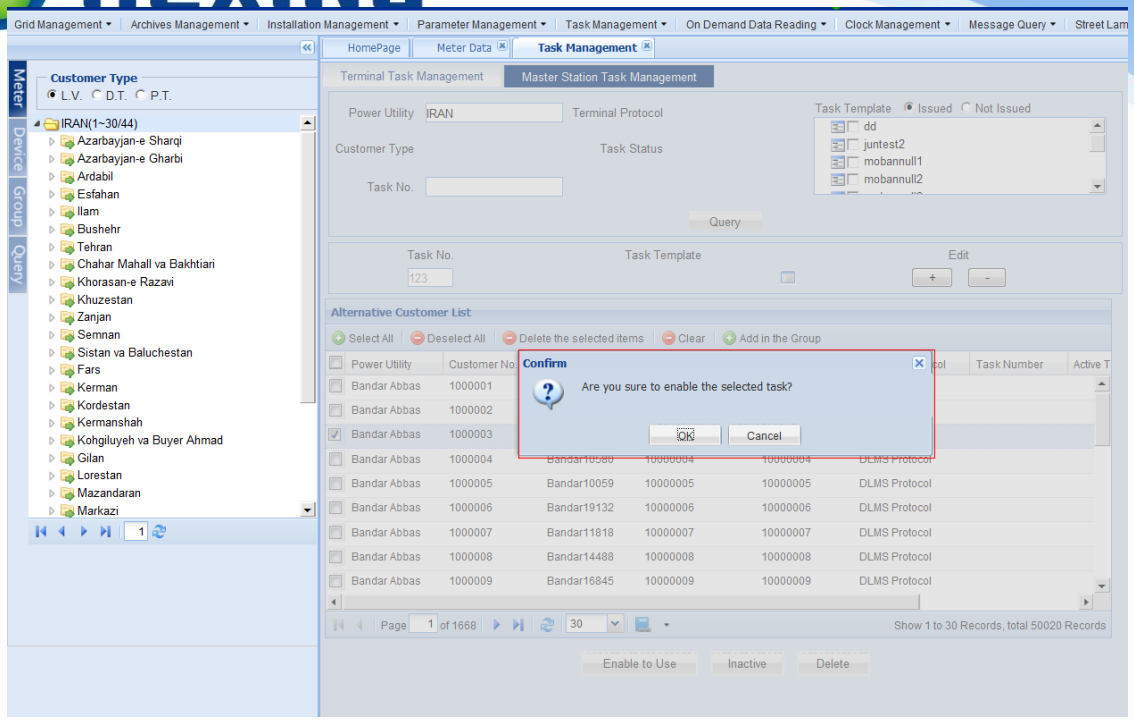


Figure 154 Enable Master Station Task Prompt Message

If the task is issued successfully, the enabling result interface will be shown directly.

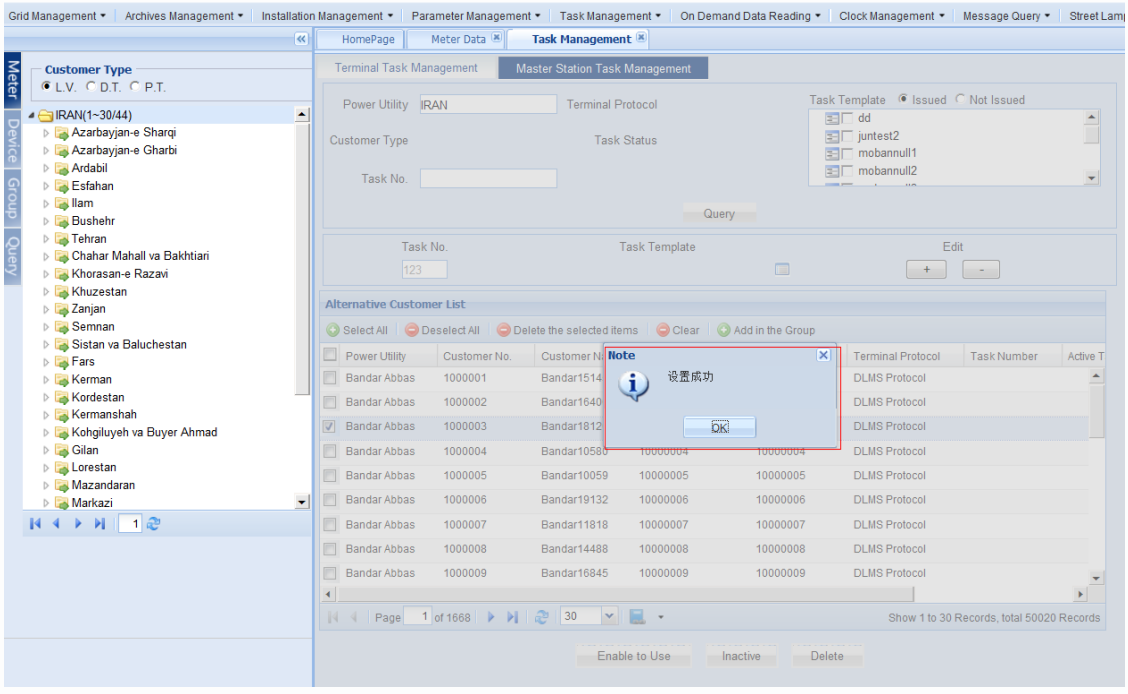


Figure 155 Master Station Tasks Enabling Result

(3) Stop Master Station Task:

Choose the customer that needs to be stopped in the Alternative Subscribe List, click "Inactive" button, and choose the task number that needs to be stopped. Here it only shows the task numbers which are still under use. Click "Confirm".

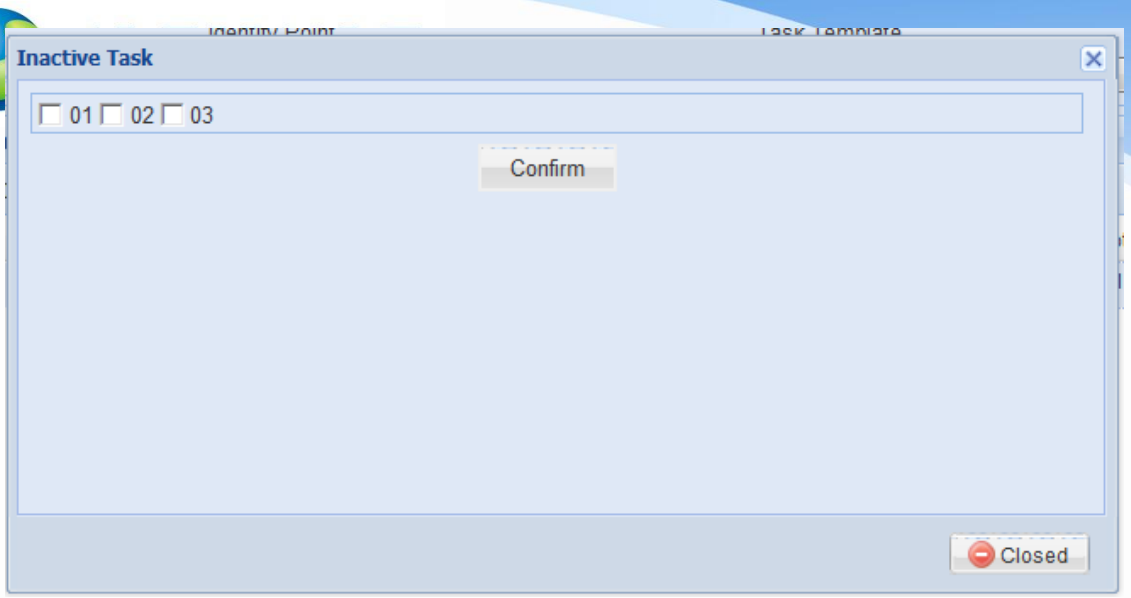


Figure 156 Choose the Task No. to be Stopped

There will be a prompt message asking if customer confirms to stop the selected task. Click “OK” to stop the task, and click “Cancel” to return to current interface.

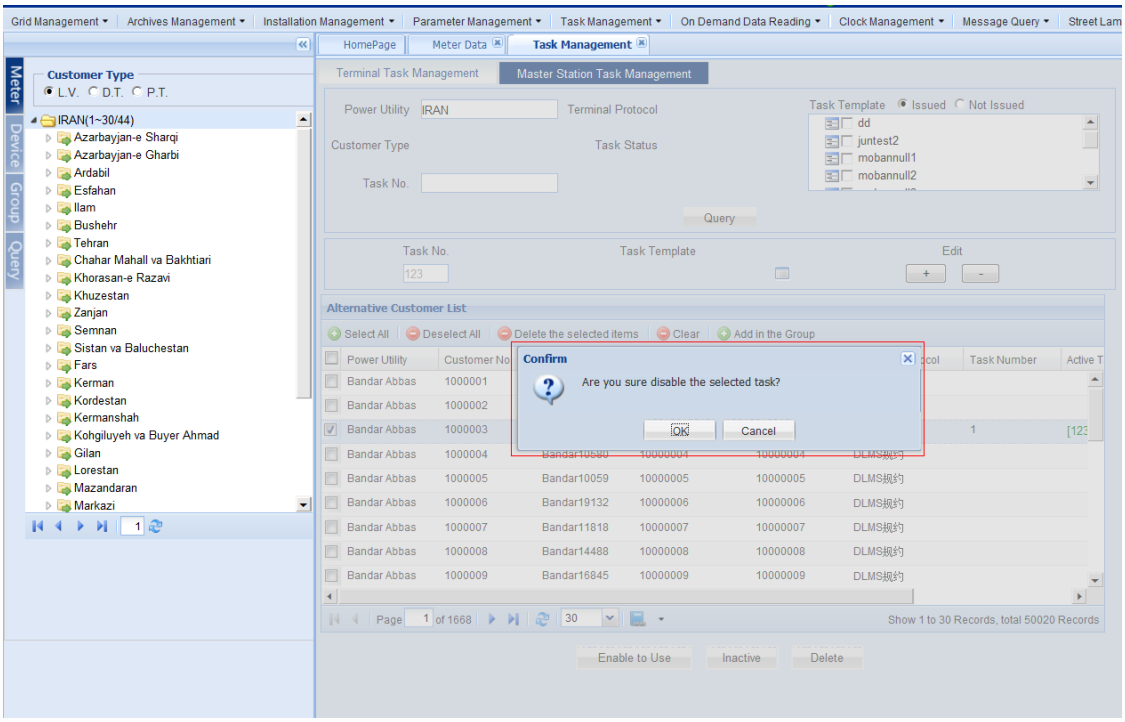


Figure 157 Confirm to Stop Master Station Task

Click “OK” button to start stopping the task. If successful, refresh the Alternative Subscribe List, and the task number that has been stopped will be shown in the Inactive Tasks list. The result of stopping task will also be shown.

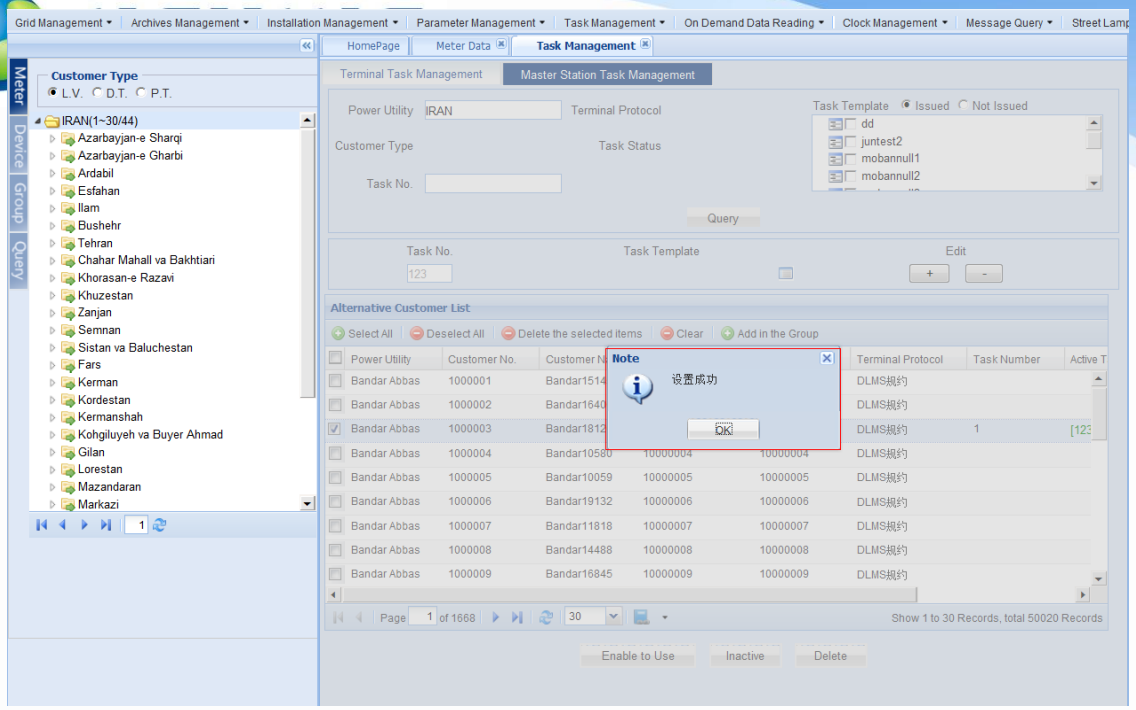


Figure 158 Return Stopping Task Result

(4) Delete the Master Station Task

Choose the equipment in the Alternative Subscribe List, and click “Delete” button. Choose the Task No that need to delete. Here it only shows the task number that is already stopped. If the task is still in operation status, you need to stop the task first then delete it.

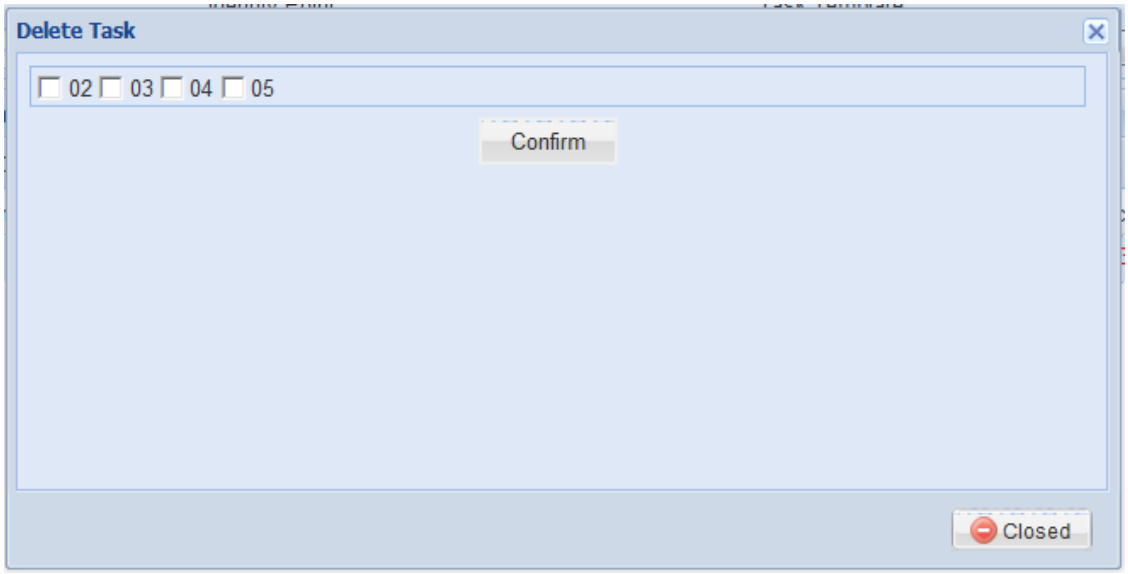


Figure 159 Choose the Task No to be Deleted

Click “Confirm” button, it will prompt message asking the customer to confirm whether to delete the selected task or not.

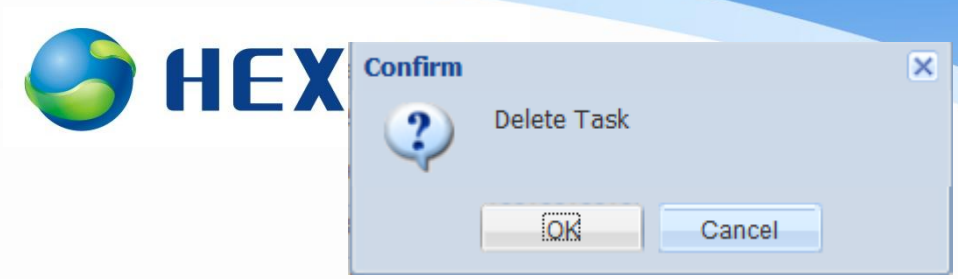


Figure 160 Confirm to Delete the Task

Click “OK” to delete the selected task; click “Cancel” to return to current interface.

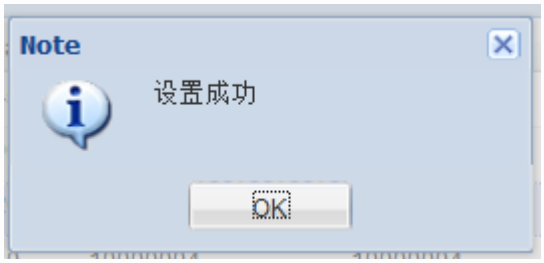


Figure 161 Delete Task Successfully

8.5. Task Execution Status

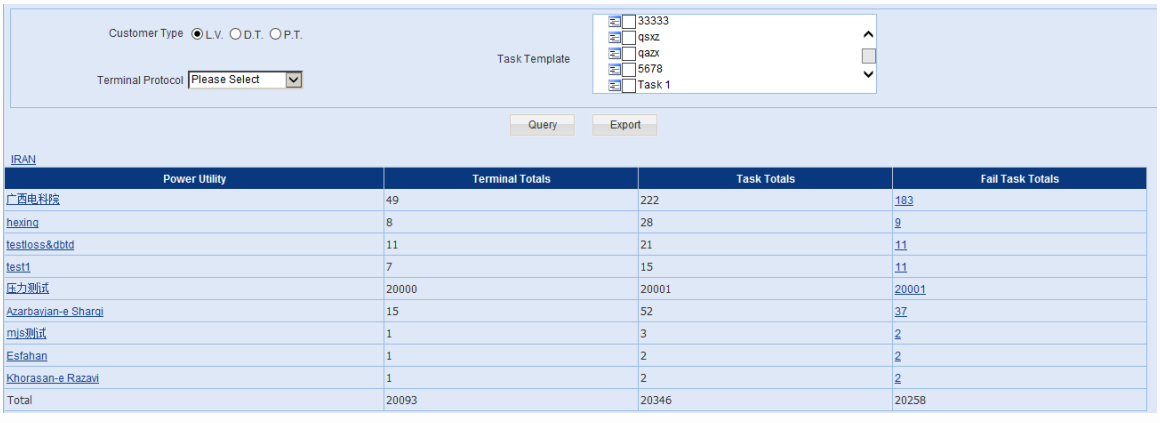
[Menu] Basic> Task Management> Task Execution Situation

[Function] check the task execution situation

[Step]

Query the Task Execution Situation:

Choose “Subscriber Type, Terminal Type, Task Template”, and click “Query” button.



Power Utility	Terminal Totals	Task Totals	Fail Task Totals
广西电科院	49	222	183
hexing	8	28	9
testloss&dbtd	11	21	11
test1	7	15	11
压力测试	20000	20001	20001
Azarbayjan-e Sharqi	15	52	37
mjs测试	1	3	2
Esfahan	1	2	2
Khorasan-e Razavi	1	2	2
Total	20093	20346	20258

Figure 162 Task Execution Status

Check the task execution situation of subordinate unit:

Click the Power Utility link in the query list to go to the subordinate unit interface.

9. Data Reading Management

9.1. Real Time Data Reading

[Menu] Basic > On Demand Data Reading > Meter Data

[Function] Reading the Terminal Real-time Data

[Step]

1) The system will show the relevant meter information in the real-time data reading interface, including “Customer, Terminal No., Logical Address”;

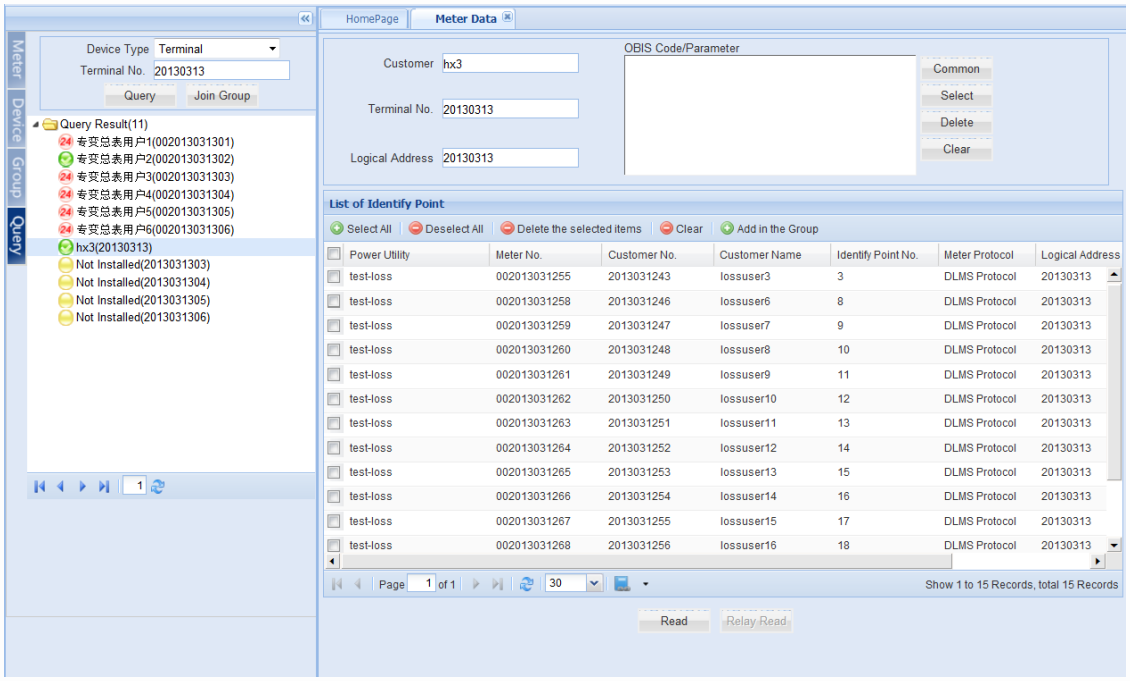


Figure 163 Real-time Data Reading

2) Click “Common” button in the Common Data Item Code interface to enter the common parameters select interface. Choose one data item type in the Data Item Type interface; choose the data items that need to read. Then click “Confirm” button;

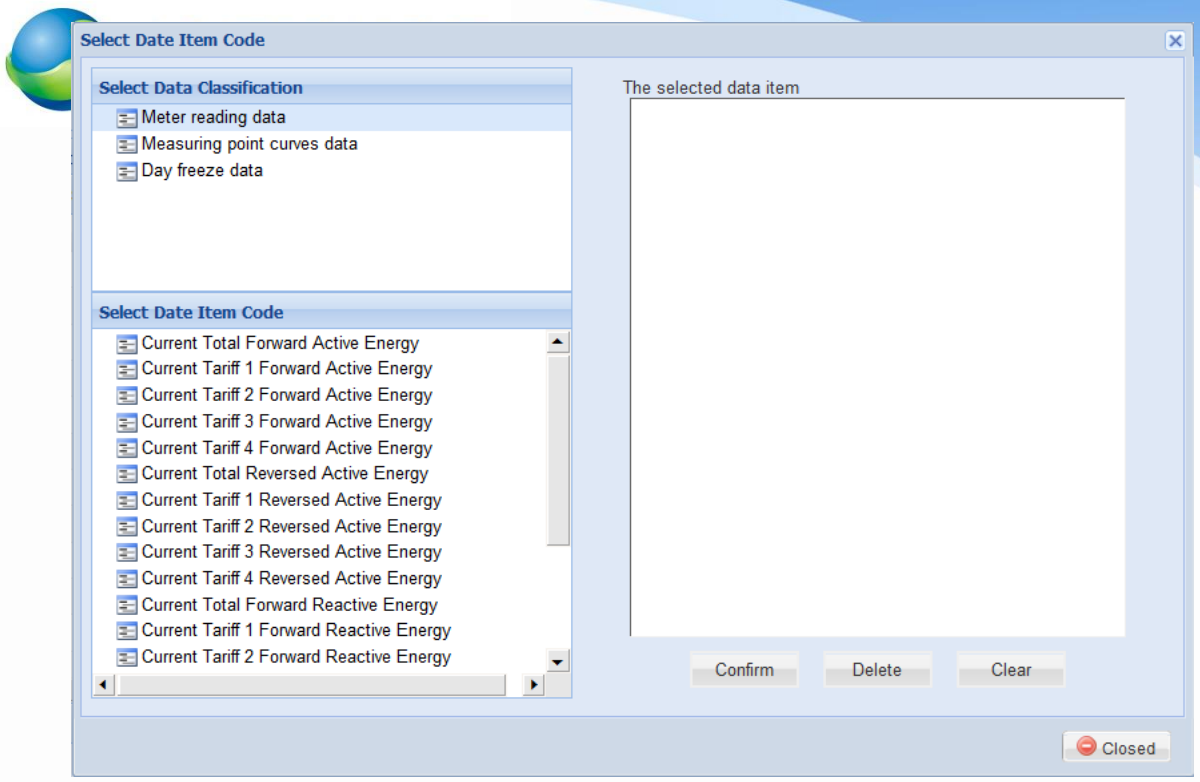

Select Date Item Code
Select Data Classification
Meter reading data
Measuring point curves data
Day freeze data
Select Date Item Code
Current Total Forward Active Energy
Current Tariff 1 Forward Active Energy
Current Tariff 2 Forward Active Energy
Current Tariff 3 Forward Active Energy
Current Tariff 4 Forward Active Energy
Current Total Reversed Active Energy
Current Tariff 1 Reversed Active Energy
Current Tariff 2 Reversed Active Energy
Current Tariff 3 Reversed Active Energy
Current Tariff 4 Reversed Active Energy
Current Total Forward Reactive Energy
Current Tariff 1 Forward Reactive Energy
Current Tariff 2 Forward Reactive Energy
The selected data item
Confirm
Delete
Clear
Closed

Figure 164 Select Data Item

3) In the Data Item Code interface, click "Select" button to enter parameters select interface. Choose one data item type in the Data Item Type interface; choose the data items that need to read. Then click "Confirm" button;

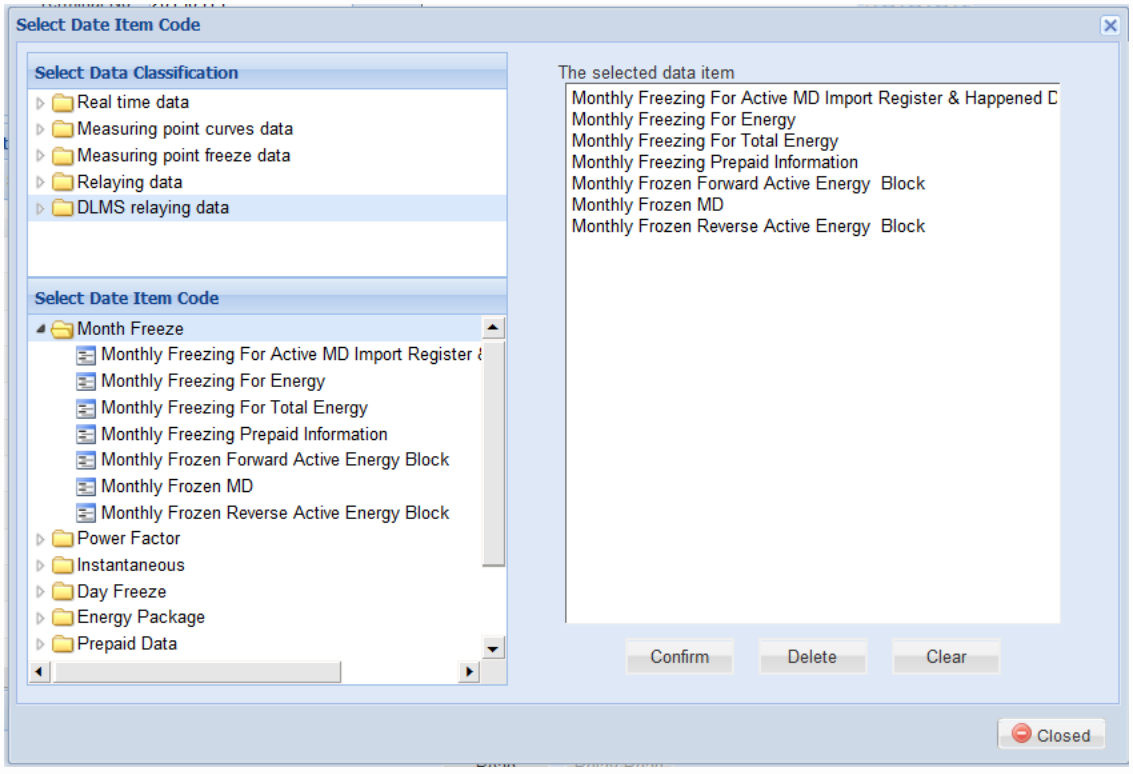


Figure 165 Select Data Item

4) Choose the meters that need to read in the Identity Point list, and click “Read” button. Input the reading overtime time in the pop-up window, and click” OK” button to read the data.

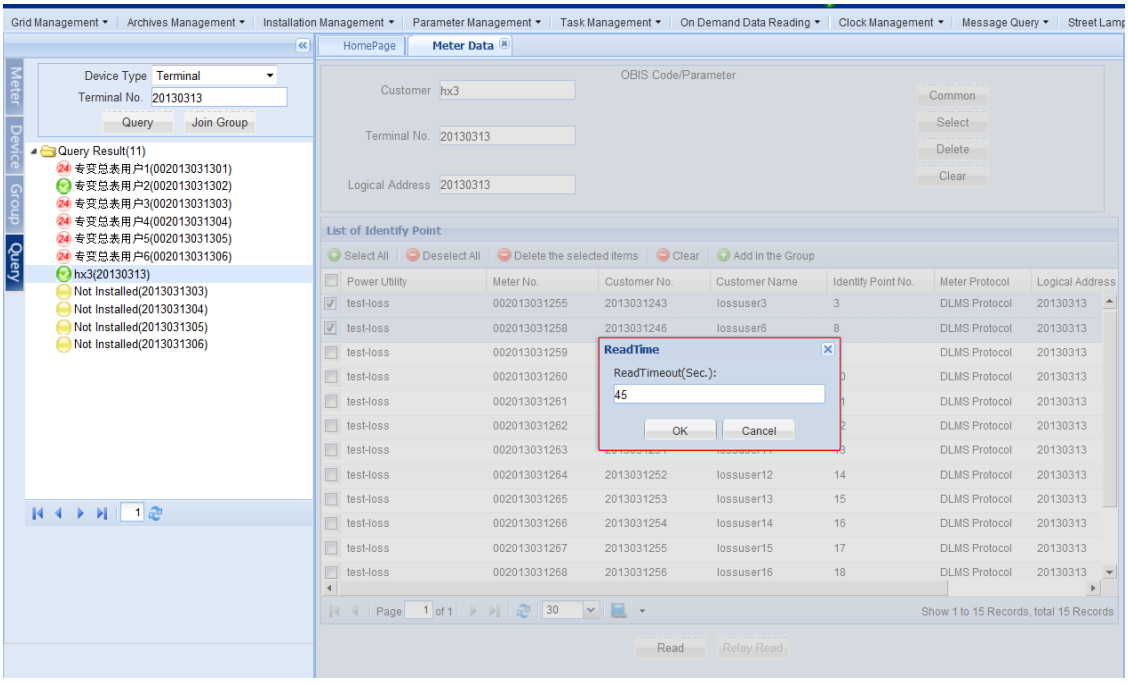


Figure 166 Prompt Setting the Reading Time

5) If reading overtime, it will show the overtime interface; once reading is successful, the result interface will be shown.

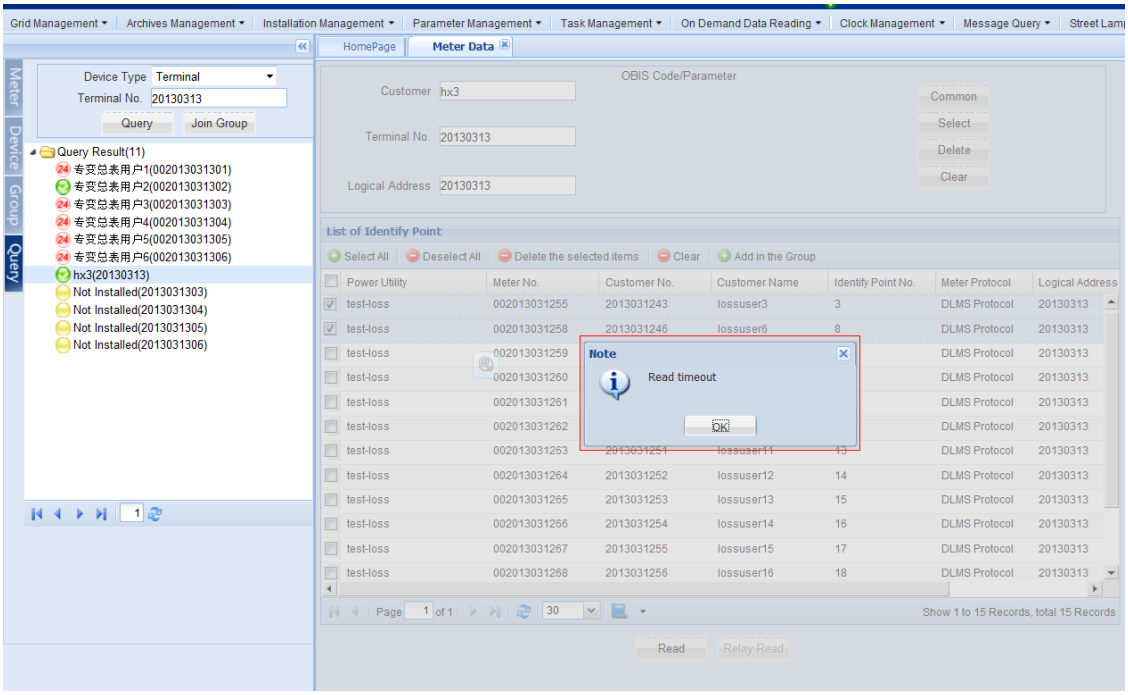


Figure 167 Reading Overtime Interface

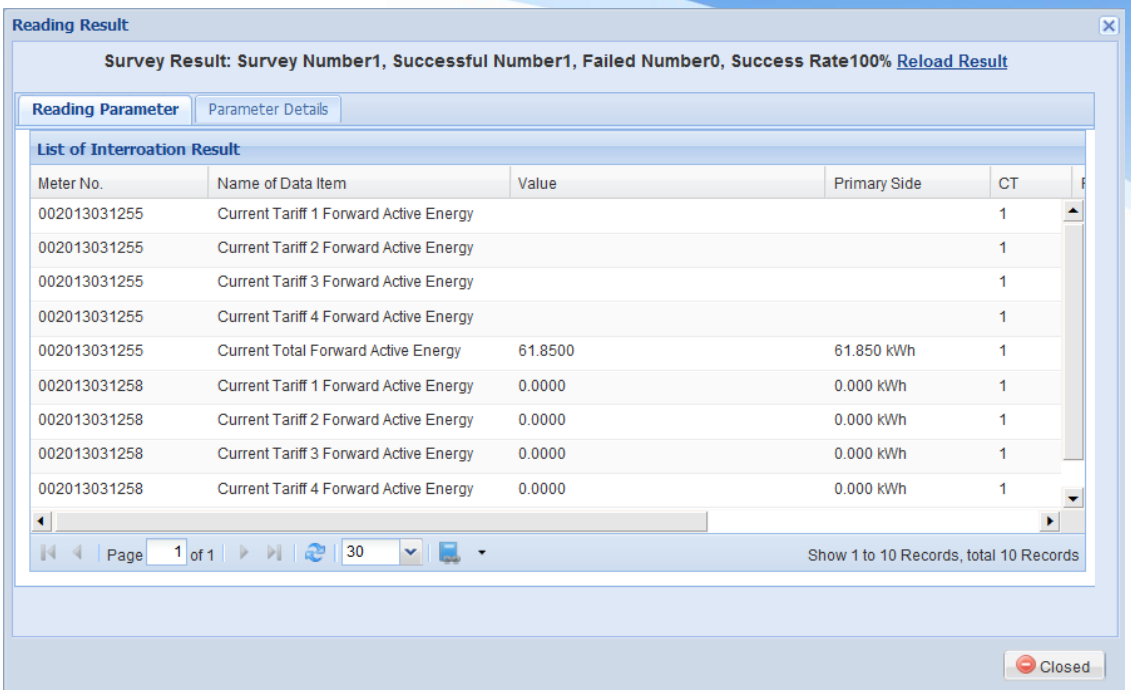

Reading Result
Survey Result: Survey Number1, Successful Number1, Failed Number0, Success Rate100% Reload Result
Reading Parameter
Parameter Details
List of Interroation Result
Meter No.
Name of Data Item
Value
Primary Side
CT
002013031255 Current Tariff 1 Forward Active Energy 1
002013031255 Current Tariff 2 Forward Active Energy 1
002013031255 Current Tariff 3 Forward Active Energy 1
002013031255 Current Tariff 4 Forward Active Energy 1
002013031255 Current Total Forward Active Energy 61.8500 61.850 kWh 1
002013031258 Current Tariff 1 Forward Active Energy 0.0000 0.000 kWh 1
002013031258 Current Tariff 2 Forward Active Energy 0.0000 0.000 kWh 1
002013031258 Current Tariff 3 Forward Active Energy 0.0000 0.000 kWh 1
002013031258 Current Tariff 4 Forward Active Energy 0.0000 0.000 kWh 1
Page 1 of 1
30
Show 1 to 10 Records, total 10 Records
Closed

Figure 168 Reading Result Interface

9.2. Batch Meter Data Reading

[Menu] Basic>On Demand Data Reading > Batch Meter Data

[Function] Reading data for multiple equipments

[Step]

Choose the equipments in the left menu, it can be power utility, feeder line, transformer area, transformer, and meter;

Data Reading: Choose the data item needs to read in “Read Data Item”, and choose the customers that need to operate in the Alternative Subscriber List, then click “Read” button.

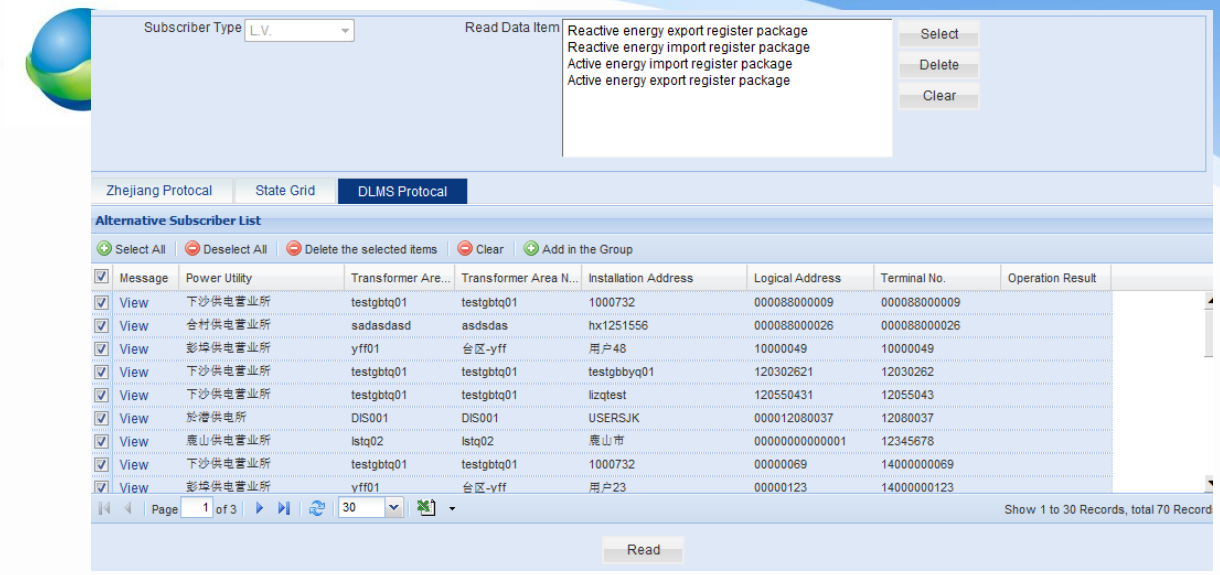


Figure 169 Batch Meter Data Reading

Query if the meter is online: click the Message property of the customer to check the communication status of corresponding meters.

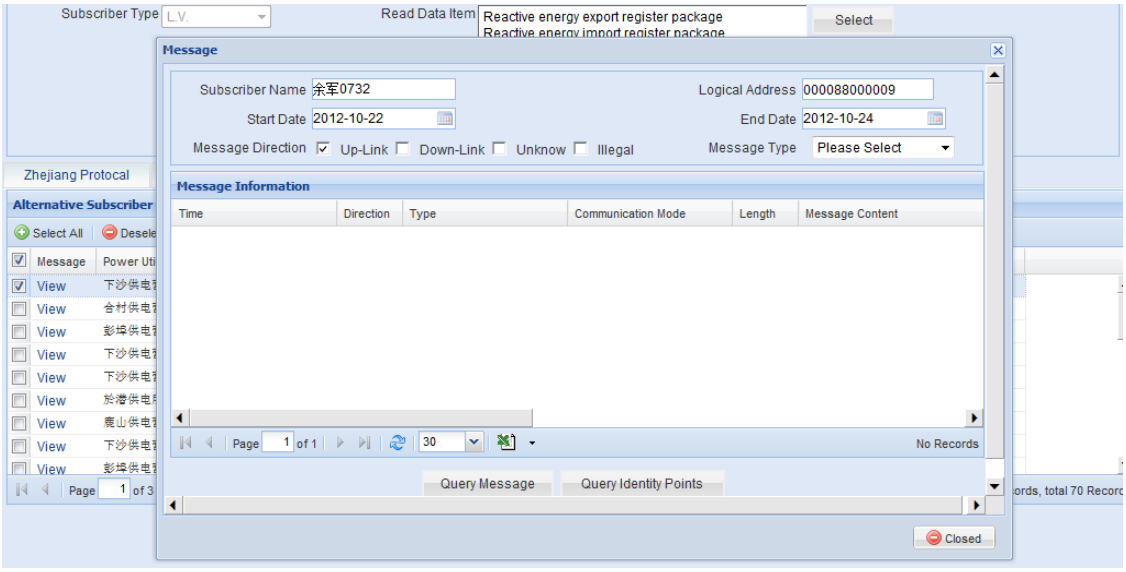


Figure 170 Query Communication Information

9.3. Channel Data Reading

[Menu] Basic>On Demand Data Reading > Load Profile Only GPRS Meter

[Function] Reading the meters' Channel Data

[Step]

Query Meter: Choose the power utility in which the meters belongs to in the menu at left, input "Meter No and Meter Type"(these information can also be empty it is not

known) , and click "Query" button.

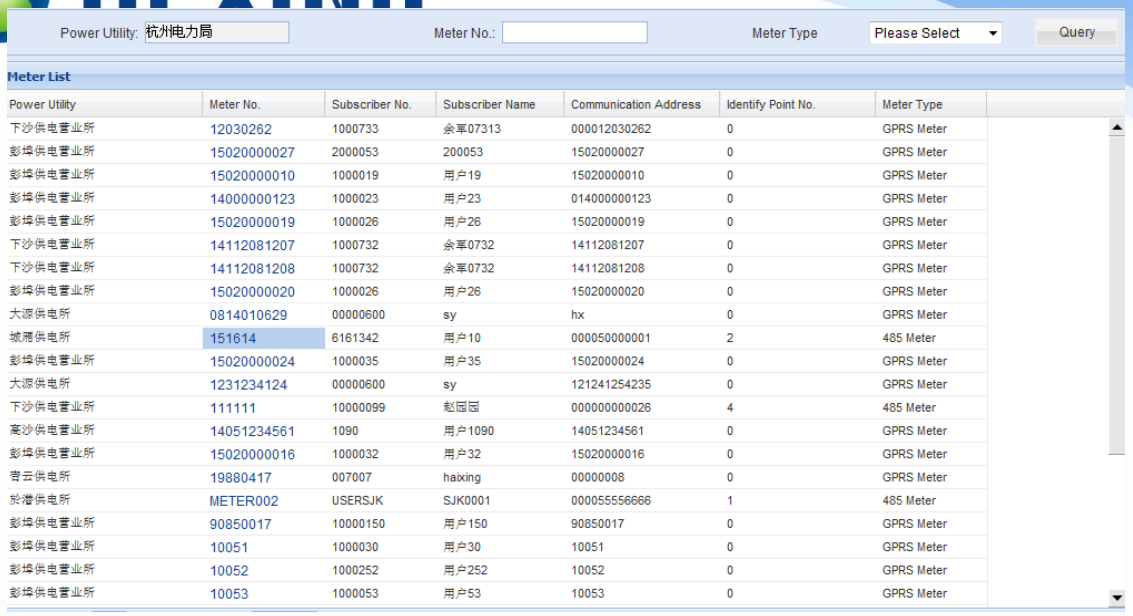


Figure 171 Query Meter

Choose Meter: choose the meters that need to operate in the Meter List. Click the property of this Meter No.

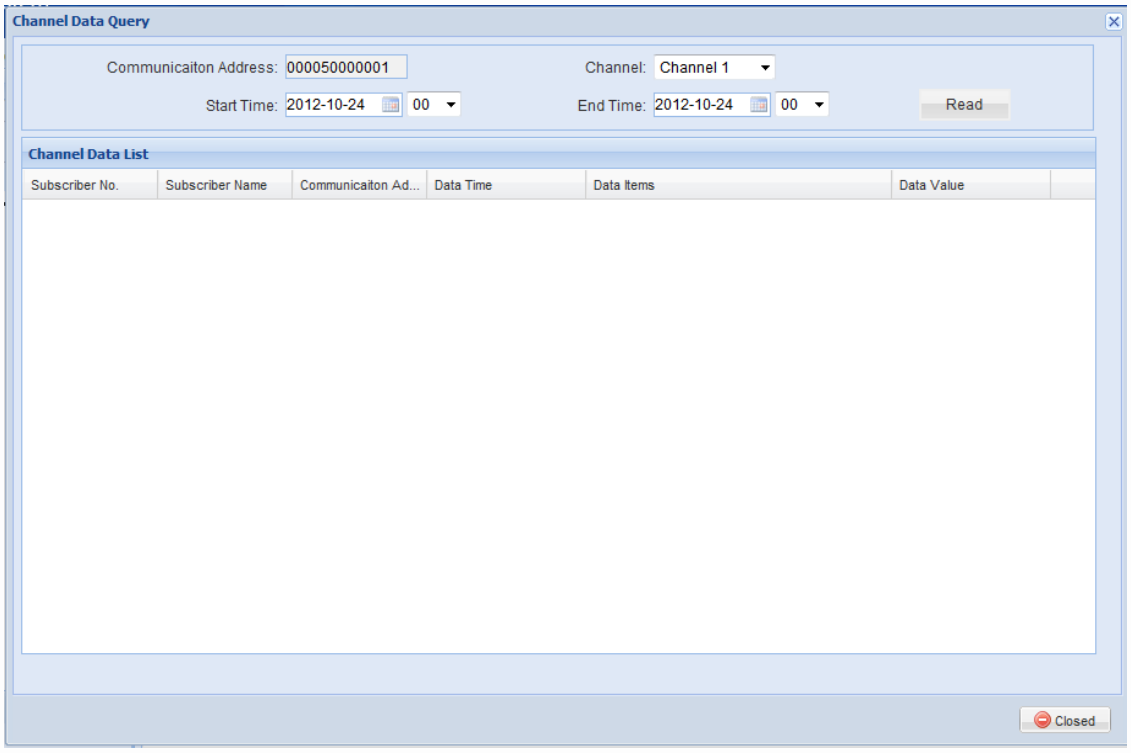

Channel Data Query
Communicaiton Address: 000050000001
Channel: Channel 1
Start Time: 2012-10-24 00
End Time: 2012-10-24 00
Read
Channel Data List
Subscriber No. | Subscriber Name | Communicaiton Ad... | Data Time | Data Items | Data Value
Closed

Figure 172 Choose Customer

Channel Data Reading: Choose the needed "Channel, Start Time, End Time", and click Read.

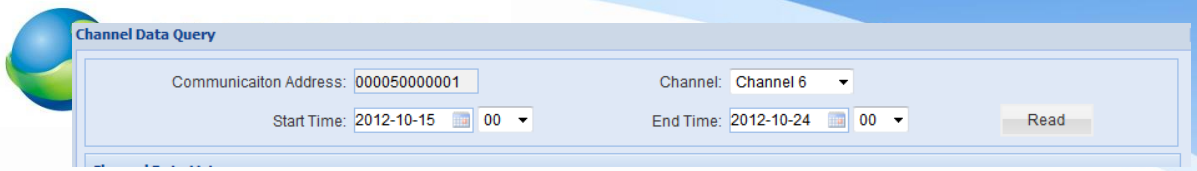
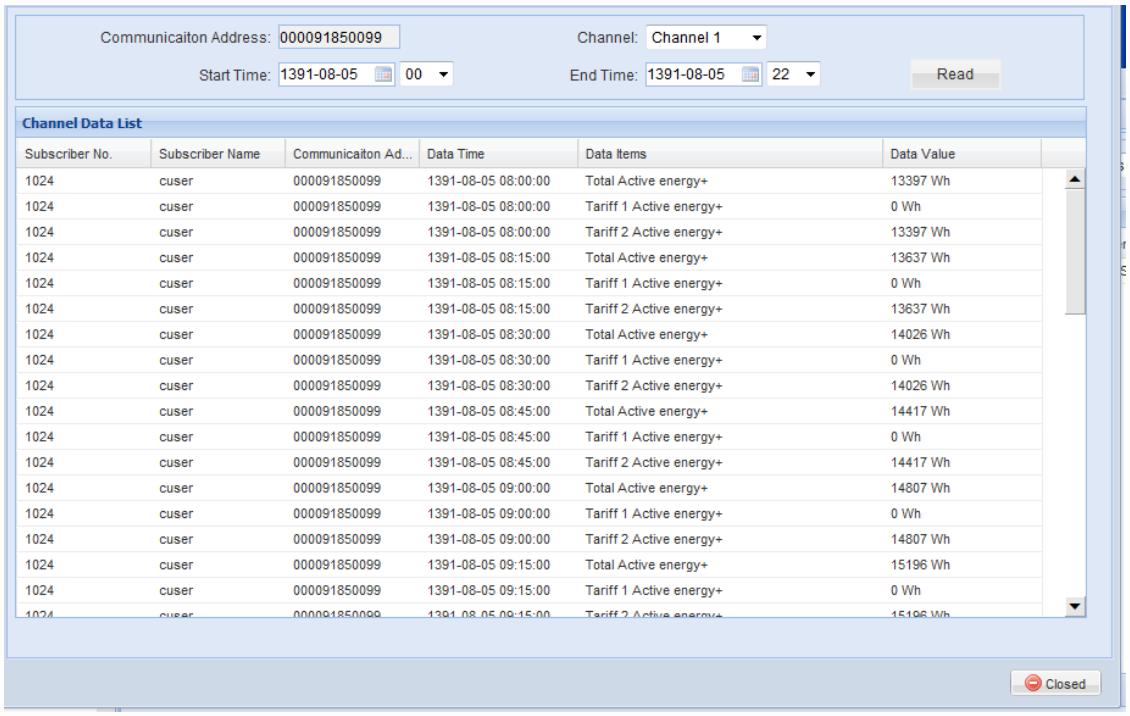


Figure 173 Channel Reading

If data reading is successful, it will show the channel data.



Subscriber No.	Subscriber Name	Communicaiton Ad...	Data Time	Data Items	Data Value
1024	cuser	000091850099	1391-08-05 08:00:00	Total Active energy+	13397 Wh
1024	cuser	000091850099	1391-08-05 08:00:00	Tariff 1 Active energy+	0 Wh
1024	cuser	000091850099	1391-08-05 08:00:00	Tariff 2 Active energy+	13397 Wh
1024	cuser	000091850099	1391-08-05 08:15:00	Total Active energy+	13637 Wh
1024	cuser	000091850099	1391-08-05 08:15:00	Tariff 1 Active energy+	0 Wh
1024	cuser	000091850099	1391-08-05 08:15:00	Tariff 2 Active energy+	13637 Wh
1024	cuser	000091850099	1391-08-05 08:30:00	Total Active energy+	14026 Wh
1024	cuser	000091850099	1391-08-05 08:30:00	Tariff 1 Active energy+	0 Wh
1024	cuser	000091850099	1391-08-05 08:30:00	Tariff 2 Active energy+	14026 Wh
1024	cuser	000091850099	1391-08-05 08:45:00	Total Active energy+	14417 Wh
1024	cuser	000091850099	1391-08-05 08:45:00	Tariff 1 Active energy+	0 Wh
1024	cuser	000091850099	1391-08-05 08:45:00	Tariff 2 Active energy+	14417 Wh
1024	cuser	000091850099	1391-08-05 09:00:00	Total Active energy+	14807 Wh
1024	cuser	000091850099	1391-08-05 09:00:00	Tariff 1 Active energy+	0 Wh
1024	cuser	000091850099	1391-08-05 09:00:00	Tariff 2 Active energy+	14807 Wh
1024	cuser	000091850099	1391-08-05 09:15:00	Total Active energy+	15196 Wh
1024	cuser	000091850099	1391-08-05 09:15:00	Tariff 1 Active energy+	0 Wh

Figure 174 Channel Data Reading Result

9.4. Meter Event Reading

[Menu] Basic>On Demand Data Reading >Meter Event Read

[Function] Reading Meter Event

[Step]

Meter Event Reading: choose the equipment node (concentrator, GPRS meter) at the menu at left, and the meters will be shown in the List of Measuring Point. Choose the meters and click Read button.

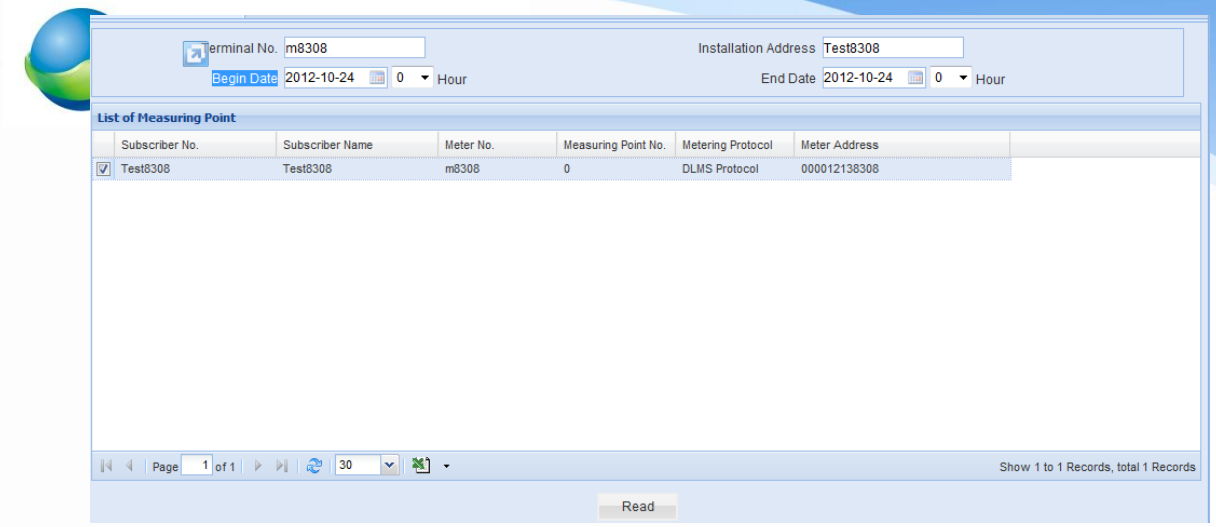


Figure 175 Reading Meter Time

9.5. Reading Concentrator Archives

9.5.1. Reading Concentrator Archives

[Menu] Basic>On Demand Data Reading >Concentrator Archives Read

[Function] Read the information of meter under the measuring point specified by the concentrator. Put into storage room and finish installation.

[Step]

1) Choose the data “Query” Tab page at left, and input the concentrator number that need to query.

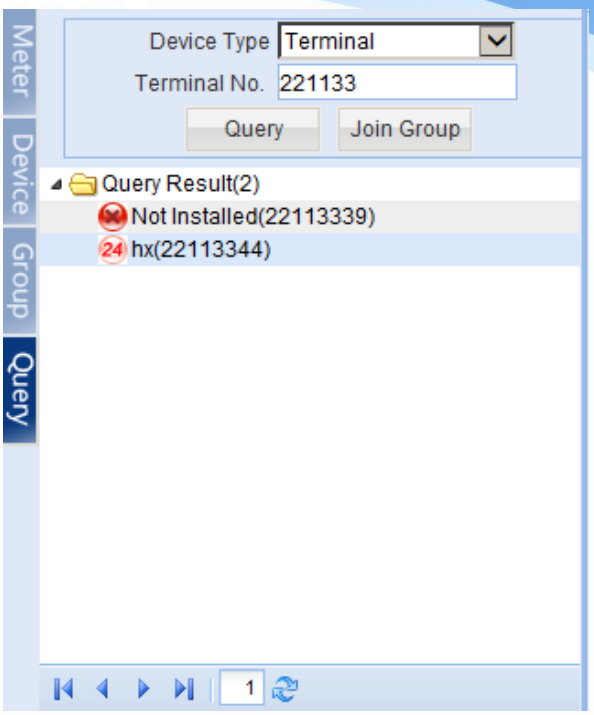


Figure 176 Choose Concentrator

2) After choosing the concentrator, the concentrator No. and installation address will be shown in the right side automatically.
3) Archives Reading: input the relevatnt measuring point in the Measuring Point No, and click “Read” button to read the archive.

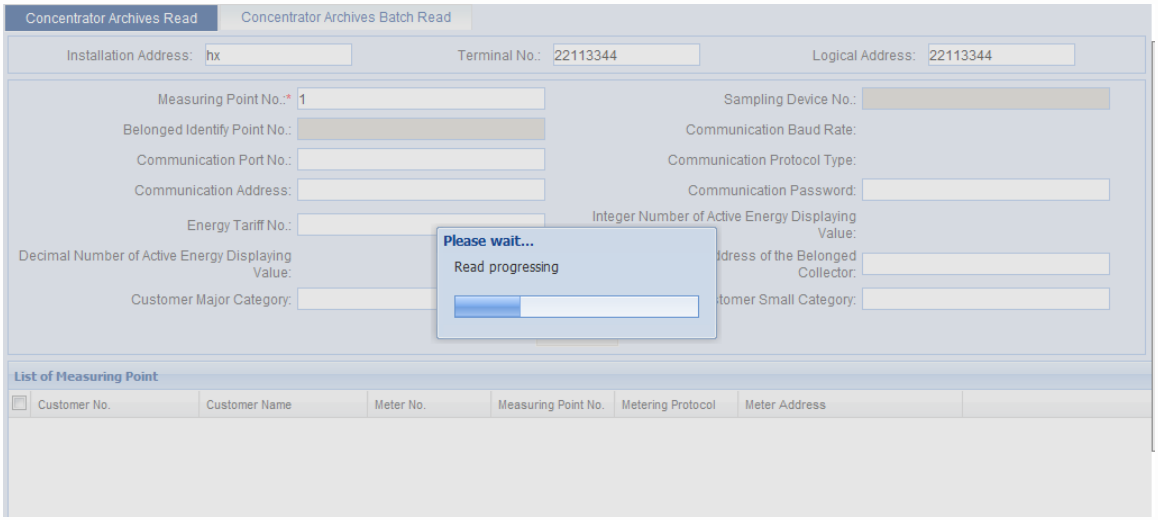


Figure 177 Reading

If the archives are reading successfully, the measuring point information that has been readout will be shown under the table; if reading failed, it will pop up the error information; if reading is overtime, it will pop up overtime prompt.

9.5.2. Batch Reading Concentrator Archives

[Menu] Basic>On Demand Data Reading > Concentrator Archives Batch Read

[Function] to read concentrator archives in batch, and specify the range of measuring

point.

[Step]

1) Choose the data "Query" Tab page at left, and input the concentrator number that need to query.

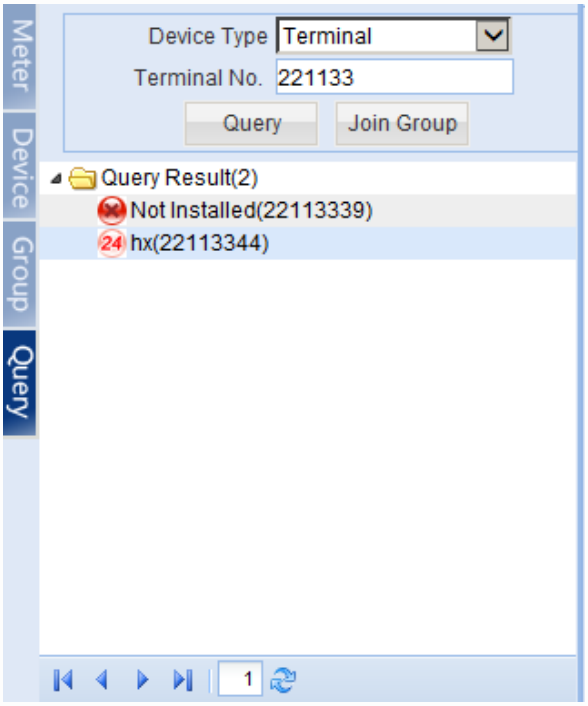


Figure 178 Choose Concentrator

2) After choosing the concentrator, the concentrator No. and installation address will be shown in the right side automatically.
3) Input "Start Measuring Point No and End Measuring Point No.". It can read information of maximum 38 pieces of measuring point at one time. The starting measuring point starts from No.2. Click "Read" to start to read the information of measuring point in batch.

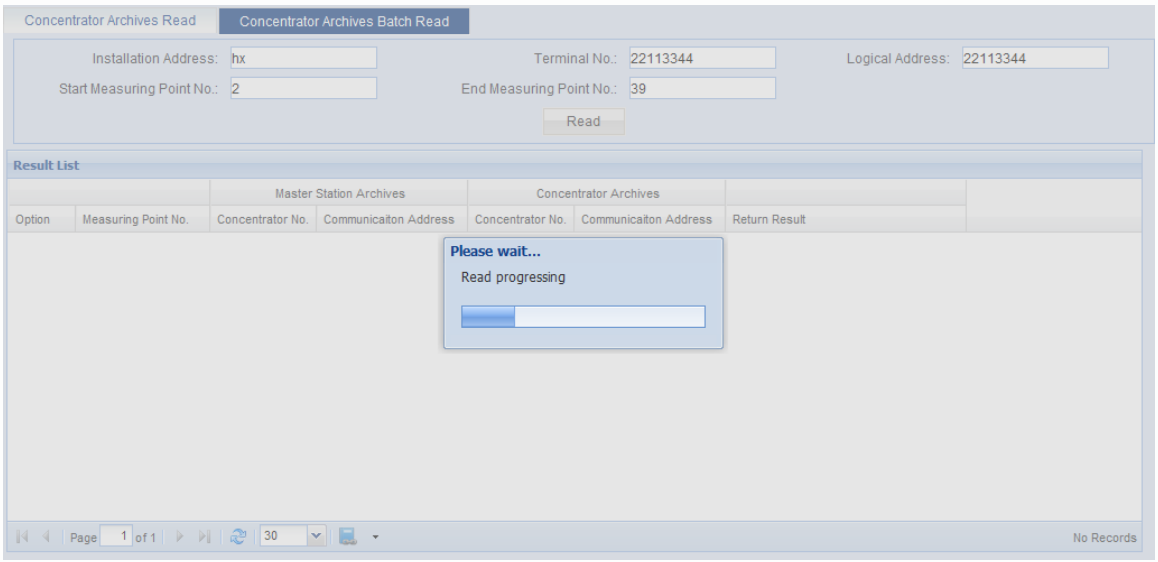


Figure 179 Reading Archives in Batch

4) If the archives are reading successfully, it will supply the function of comparing system and concentrator archive. If for the same measuring point, and the relevant actives of concentrator and master station are different, the system supplies three operating buttons, namely, delete the concentrator measuring point, delete the master station archives, update the master station measuring point information; the customer can process according to the actual conditions.
Note! Batch reading of archives function will not be installed automatically, you need to do it manually.

10. Parameter Management

10.1. Terminal Parameter Setting

[Menu] Basic > Parameter Management > Parameter Setting

[Function] Remote setting and reading of GPRS meter and terminal parameters

[Step]

1) Choose GPRS meter/terminal in the equipment tree at left, and the system will show this GPRS meter/terminal information in the terminal parameter setting interface. GPRS meter information include: Customer No, Customer Name, Terminal No., Logical Address; Terminal information include: Installation Address, Terminal No., Logical Address;
2) Parameter Setting: choose one of the parameter classifications in the parameter interface, and all the parameter items of this classification will be shown in the terminal local parameter interface. choose the parameters that need to set, input parameter value, and click “Set” button;
3) Parameter Reading: choose one of the parameter classifications in the parameter interface, and all the parameter items of this classification will be shown in the terminal local parameter interface. Choose the parameter items that need to read, and click “Read” button;
4) Save Parameter Reading Result: if you need to save the parameter reading result, click “Save” button to save it.

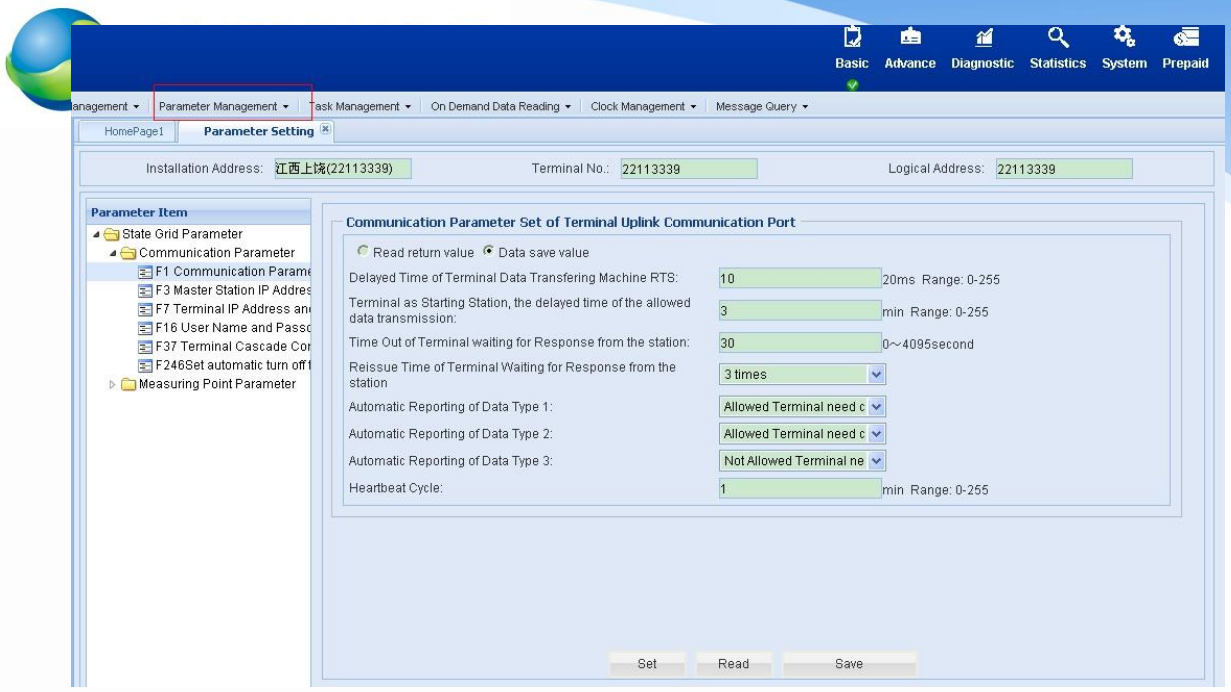


Figure 180 Terminal Parameter Setting

Note!

DLMS parameters include: GPRS Parameters, IHD Communication, and Basic Parameters.

Setting status classification: set successfully, terminal overtime and no response, reading overtime;

The reasons for terminal overtime and no response, reading overtime might be:

1) Terminal off line (poor network, SIM card without money, Gateway not open);
2) The terminal ports and gateway port are not the same;
3) The IP address of master station and system are not the same.

10.2. Group Parameter Setting and Adding

[Menu] Basic > Parameter Management >Group Parameter Setting

[Function] Read setting and reading of GPRS meter and terminal parameter in batch.

[Step]

1) Choose the power utility node, and all the terminals that has been put into operation in this power utility will be loaded to the List of batch setting and reading;

2) Parameter Setting: for the same protocol, you can select multiple terminals that need to set. Click "select parameter item", and choose the protocol that corresponds with the previous protocol in the pop-up window. Choose the data items that need to set, input the parameter, and click "send" button;

3) Parameter reading: for the same protocol, you can select multiple terminals that need to set. Click "select parameter item", and choose the protocol that corresponds with the previous protocol in the pop-up window. Choose the data items that need to set, and click "Read " button;

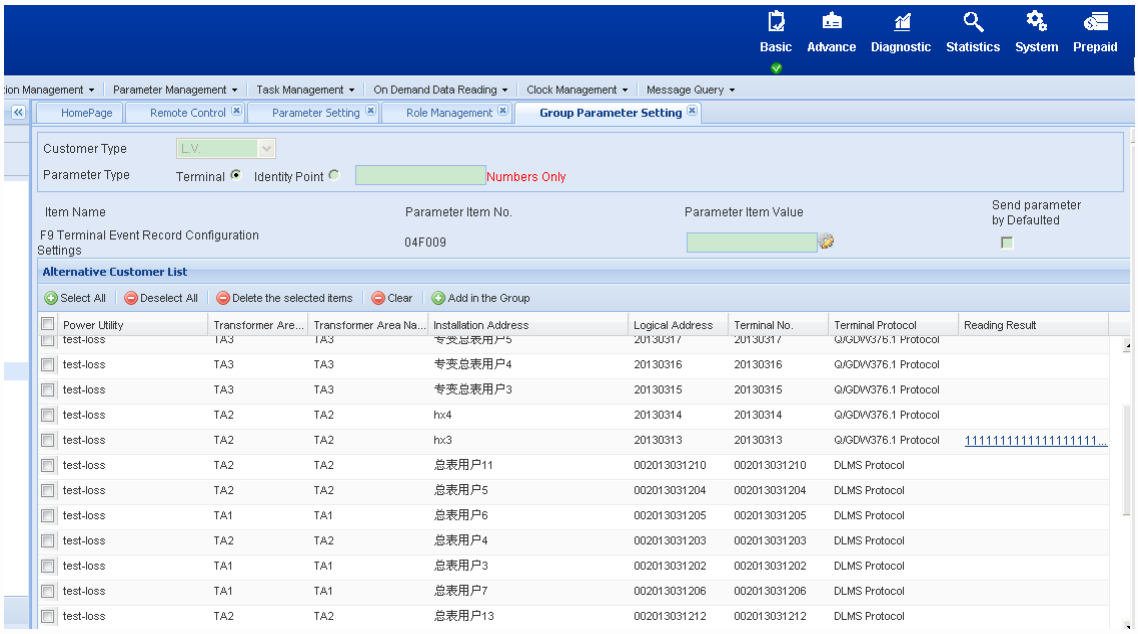


Figure 181 Terminal Parameter Setting in Batch

10.3. Terminal Alarm Filtering

[Menu] Basic > Parameter Management > Alarm Filter

[Function] To disable and enable the terminal alarm function.

[Step]

➢ **Steps of terminal alarm of DLMS protocol**

1) Choose DLMS protocol terminal in the equipment tree, and enter the relevant terminal alarm filtering interface. In this interface, there is information as below: Power Utility, Customer Type, and Protocol Type.

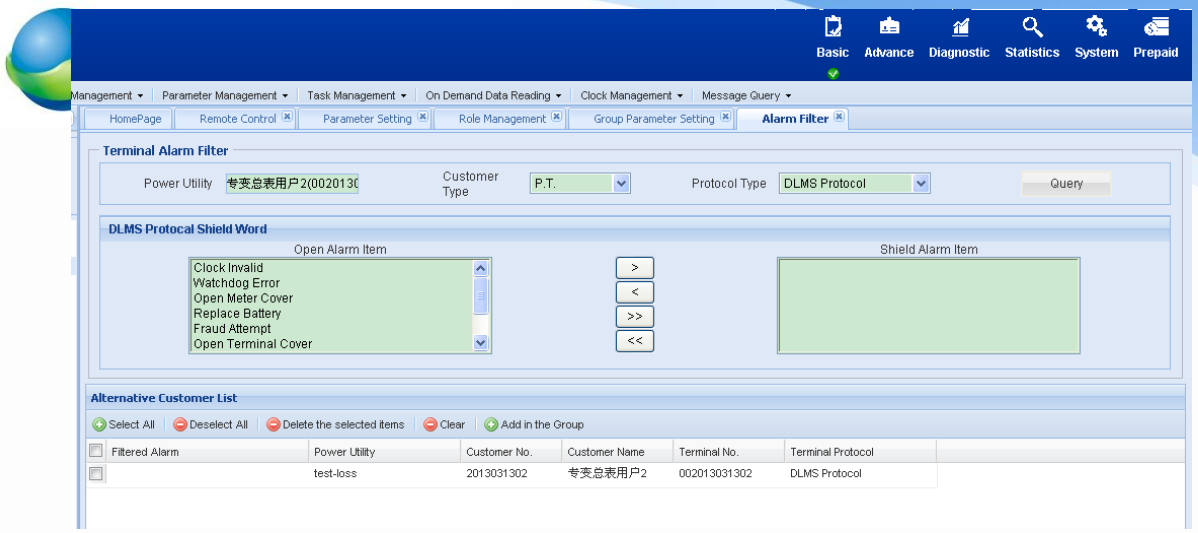


Figure 182 Terminal Alarm Filter DLMS

2) Reading: choose the terminal, and click "Read" button to read the alarm configuration of current terminal. The reading result will be shown in the Reading result column in the table. Click the returned result to analyze it. The analysis result will be shown in the enable starting alarm item and filter alarm item;

3) Start up the alarm item: click "Open Alarm" button, and the data items in the alarm item area will be enabled and sent to the terminal;

4) Filter alarm item: click "Filtered Alarm" button, and the data items in the alarm item area will be disabled and sent to the terminal

➢ **The steps of alarm filter under China Grid protocol**

1) Choose the terminal of china grid protocol in the equipment tree to enter the relevant alarm filter interface. The information in this interface is the same as that of DLMS protocol.

2) Reading: choose the terminal, click "Read" button to read the alarm configuration of current terminal. The reading result will be shown in the Reading result column in the table. Click the returned result to analyze it. The analysis result will be shown in the effective event and important event list;

3) Set event identification: set the event item to the relevant effective event and important event list, click "Put Into Operation" button to set the event.

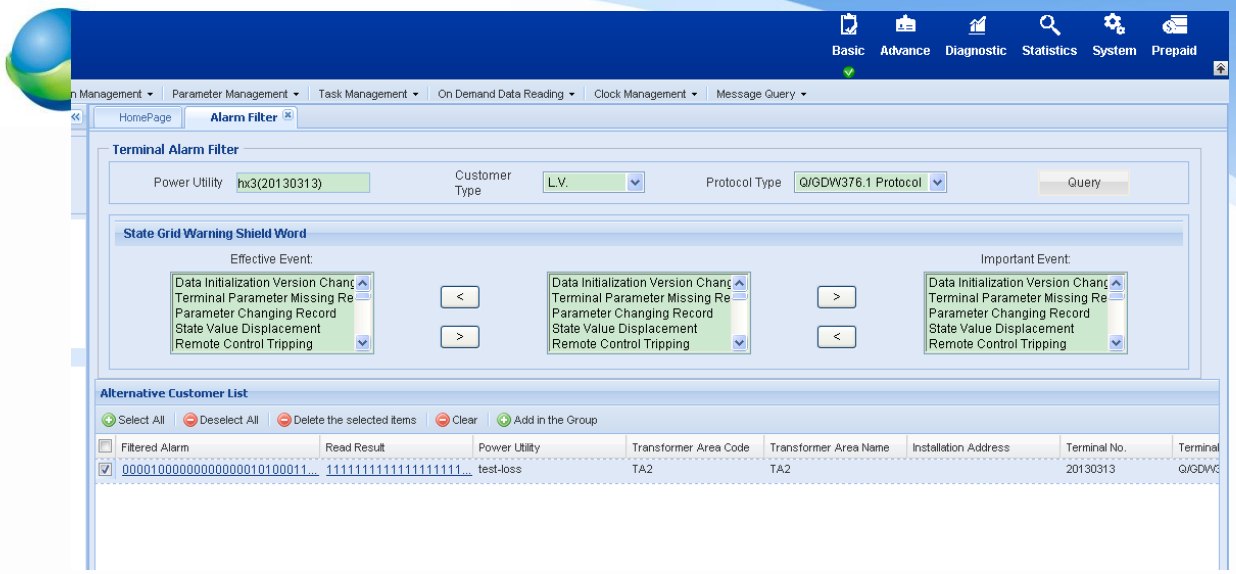


Figure 183 Terminal Alarm Filter

- **The steps of alarm filter of Zhejiang protocol**

  Please refer to the steps of DLMS protocol

Note!

The radio button of "To issue it by force to the users whose alarm filter words are empty":

If alarm filter has never been set to this terminal before(the first time to set alarm filter words), you need to choose the radio button then you can issue it to the meter. Otherwise, the system will not make any operation.

If alarm filter has been set to this terminal before, then you don't need to choose the radio button, and it can be issued to the meter.

Below is an example with terminal of DLMS protocol:

1) Read Alarm Configuration of Terminal

   1. Choose DLMS terminal in the equipment tree;

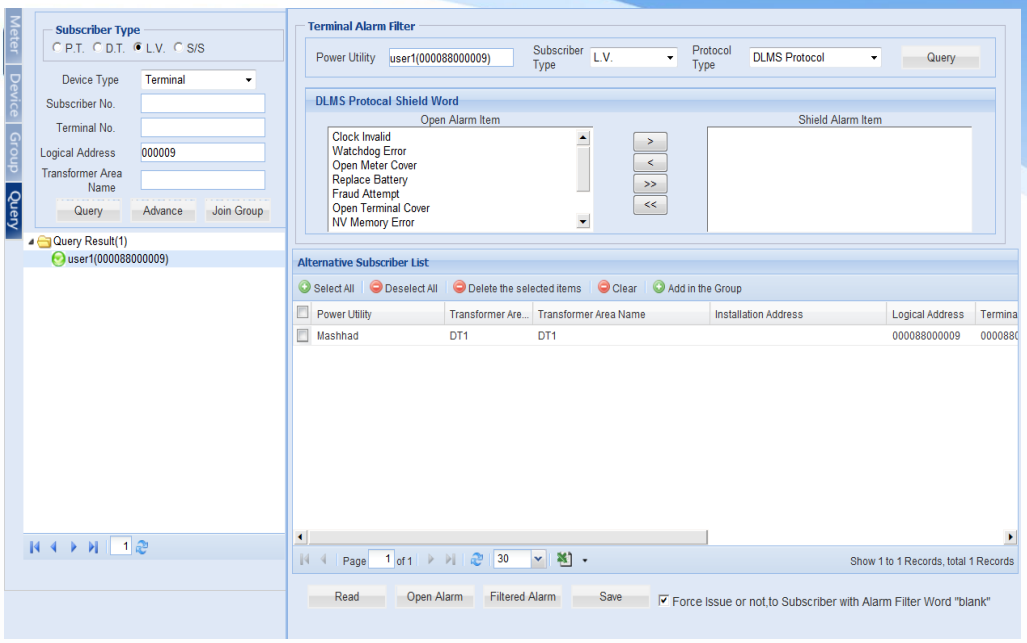


Figure 184 Choose DLMS Terminal

2. Click “Read” button and it will prompt “Read Timeout(Sec)”. The default time is 45s (the time can be custom settings).

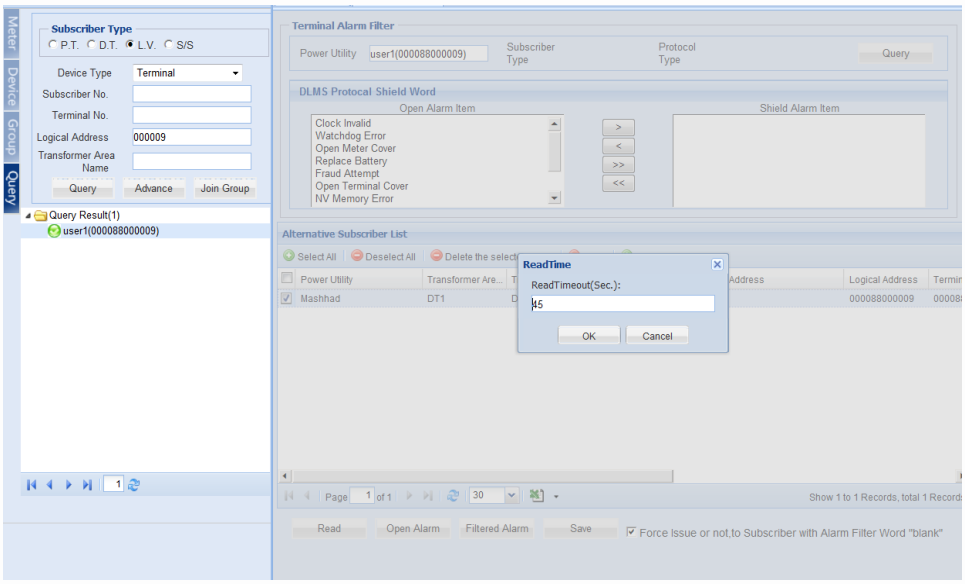


Figure 185 Read Data

3. Click “OK” button, it will prompt message “please wait, Read progressing”.

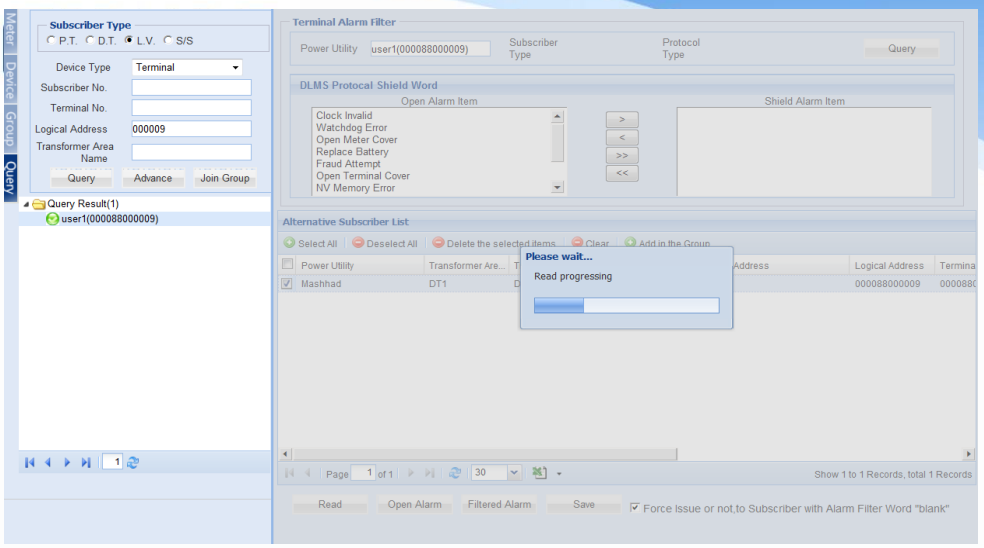


Figure 186 Reading

4. When reading is successful. The result will be returned and shown in the Read result column.

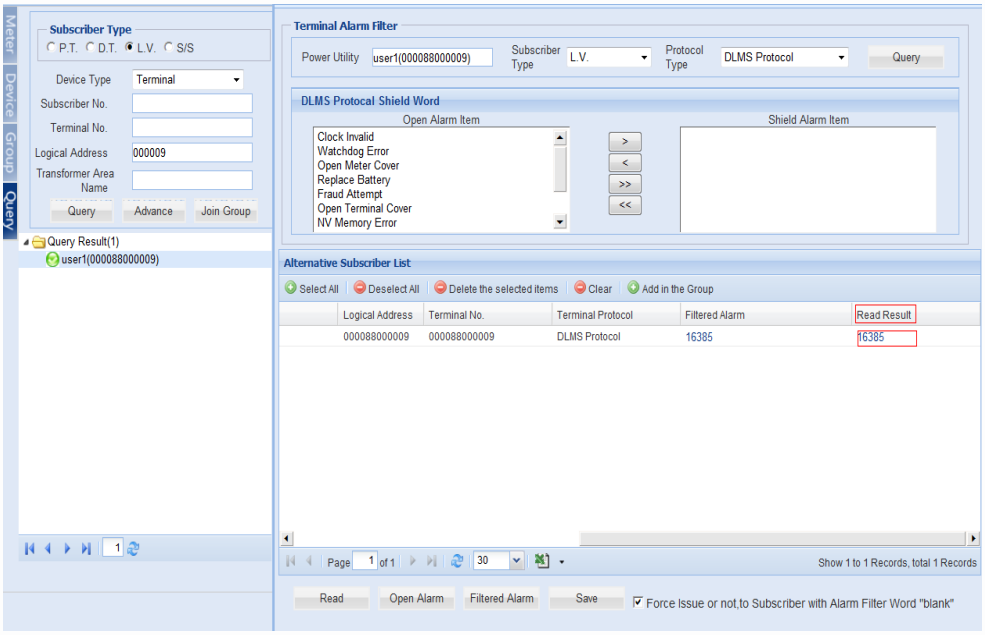


Figure 187 Display the Reading Result

5. When reading is overtime, it will prompt information “Read timeout”.

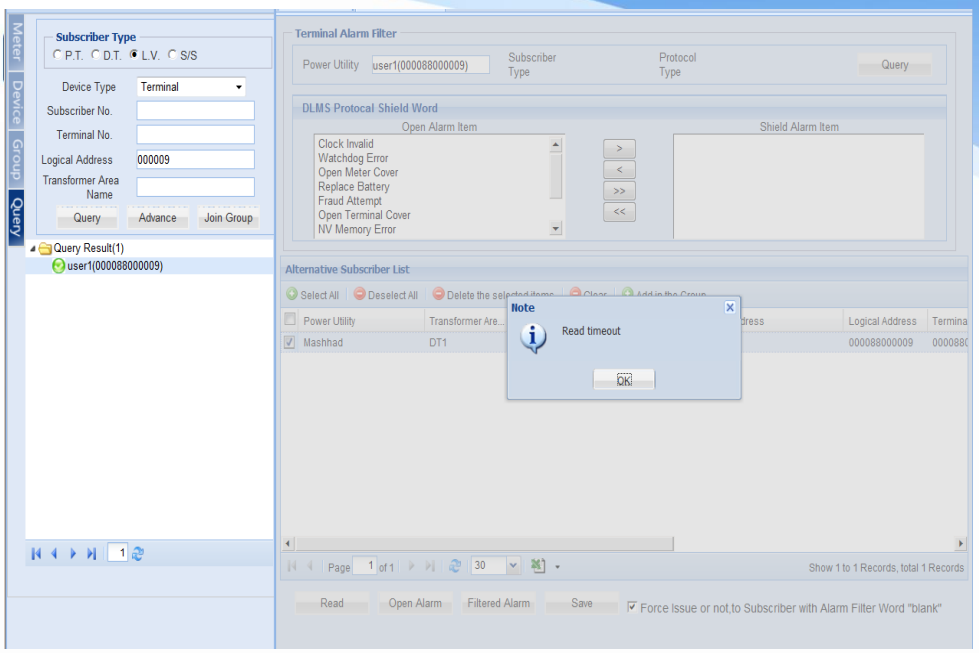


Figure 188 Reading timeout

2) Click the returned value in the read result list to analyze the result. And the analysis result will be shown in the open alarm item and filter alarm item list.

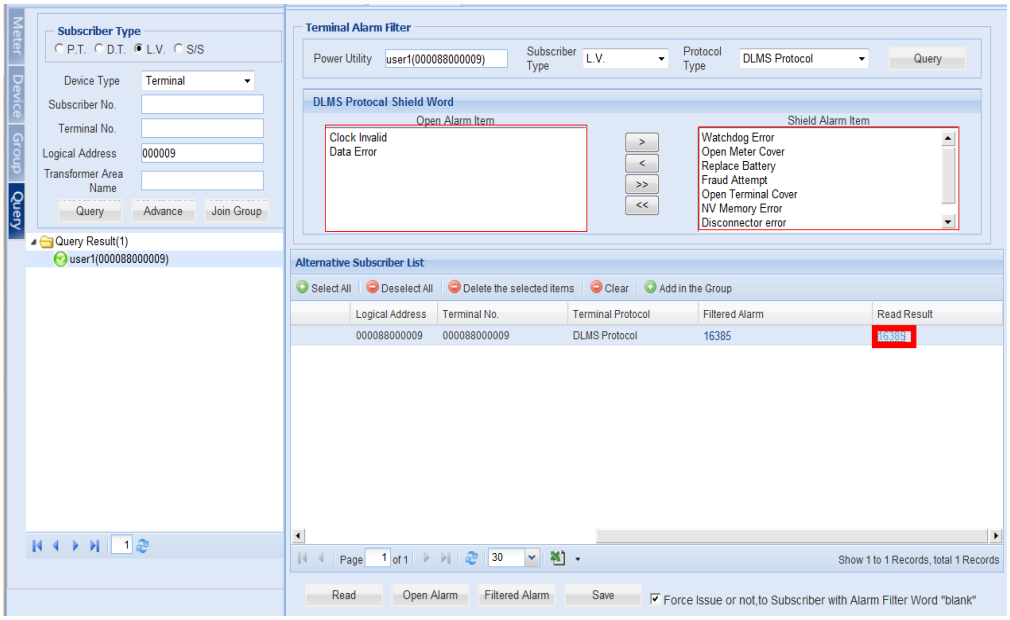


Figure 189 Show the Details of Starting alarm and filtering alarm

3) Click “Open Alarm” button, and the data items in the alarm item area will be enabled and sent to the terminal. The steps are the same as click “Read”.

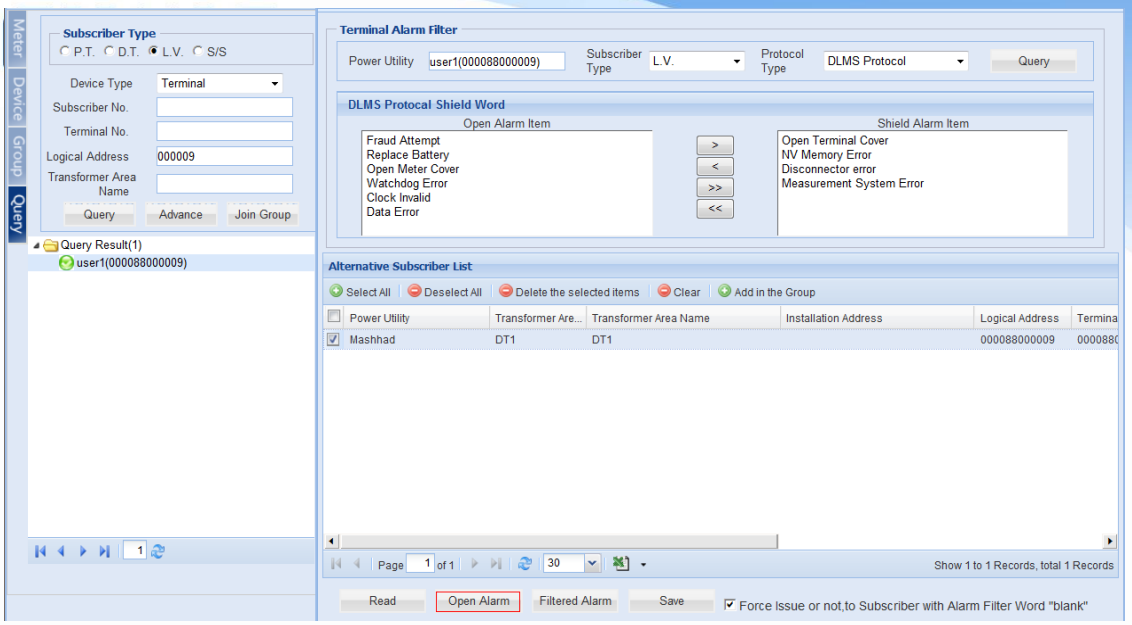


Figure 190 Start up Alarm Item

4) Click “Filtered Alarm” button, and the data items in the alarm item area will be disabled and sent to the terminal; the steps are same as click “Read”.

5) Click “Save” to save the reading result and setting result.

1. Prompt message showing “saving successful”;

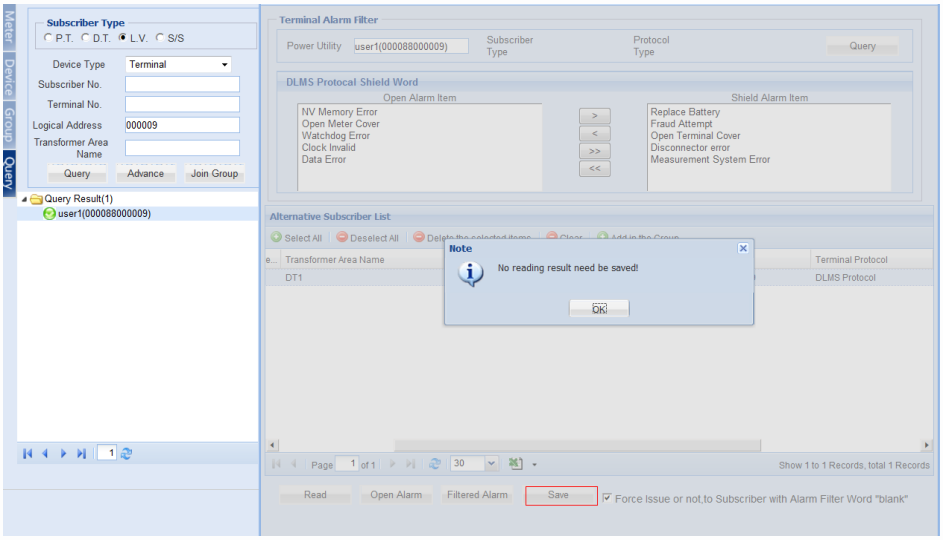

Note
No reading result need be saved!
OK
Read Open Alarm Filtered Alarm Save
Force Issue or not,to Subscriber with Alarm Filter Word "blank"

Figure 191 Save Setting Result

2. Refresh the “Set Result” list, it will prompt message “return successfully”;

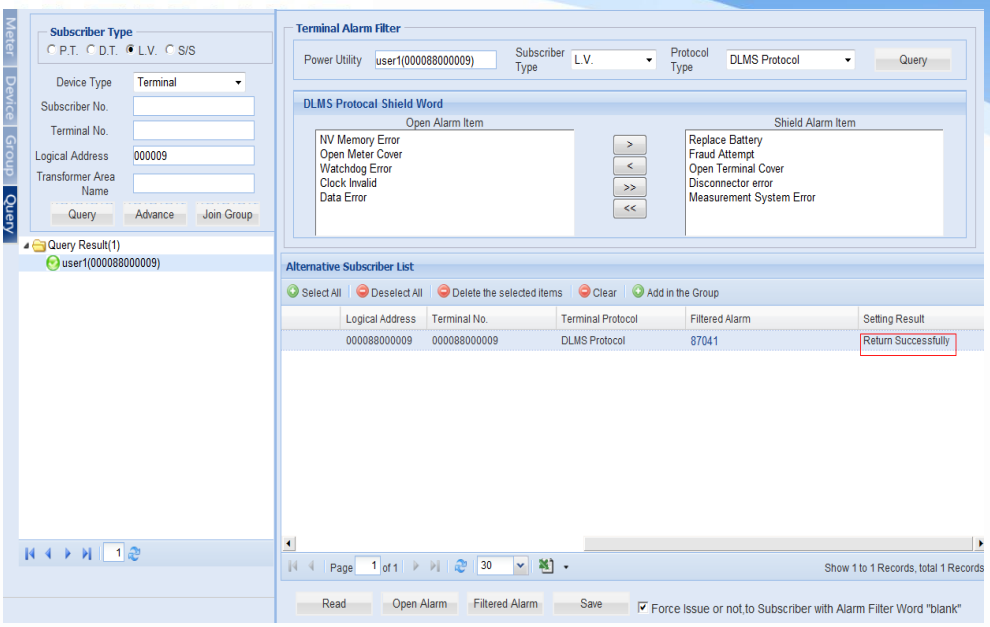


Figure 192 Setting Result

10.4. Read Terminal Setting

[Menu] Basic > Parameter Management > Terminal Setting Read

[Function] to Read Terminal Setting

[Step]

1) Choose terminals with different protocols in the equipment tree, and enter the reading terminal setting interface. You will get below information of relevant terminal: installation address, terminal bureau No, terminal logic address, protocol parameter item;

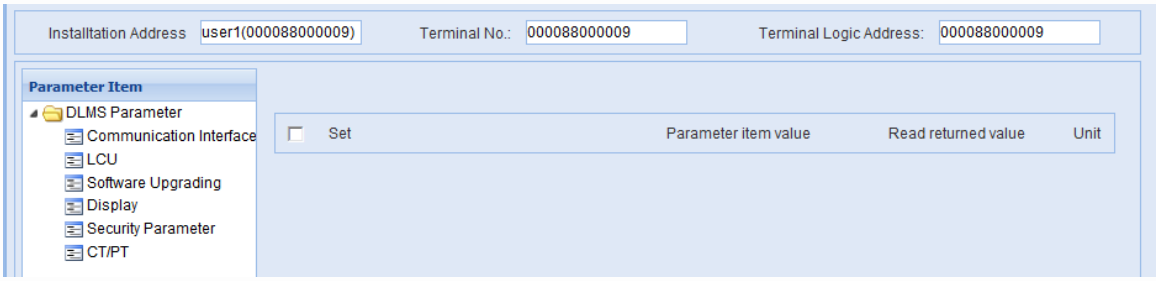


Figure 193 Choose Terminal

2) Read: choose parameter items and parameter name, click “Read” button to read the configuration of terminal, and the reading result will be returned.

3) Save reading result: click “Save” button to save the returned reading value. And this value will be shown. If the reading value is not returned, it will indicate that no reading results need to be saved.

Note!

1) The reading of terminal configuration supports various protocols, such as Zhejiang province protocol, DLMS, china grid protocol.

2) Classification of protocol parameter items:

    1. Zhejiang province protocol parameter include: Terminal Version Information;

    2. DLMS parameter include: display, CT/PT, LCU, software upgrade, communication interface definition, safety parameter;

3. China Grid protocol parameter include: F1 terminal version information, F2 The input, output, and communication port configuration supported by terminal, F3 the other configuration supported by terminal, F4 parameter configuration supported by terminal, F5 control configuration supported by terminal, F8 event record configuration supported by terminal;

3) Reading Status

1. Reading successful(it will show the returned reading result and indicate reading successful)
2. Reading failed(it will not show the returned reading result and indicate reading failed)

Below is an example with terminal of DLMS protocol.

Terminal of DLMS protocol> DLMS Parameter > Communication Interface > RS-485-Configuration word:

1) Reading Terminal Configuration

1. Choose DLMS terminal in the equipment tree, go to DLMS Parameter >Communication Interface, and tick the RS-485-Configuration word.

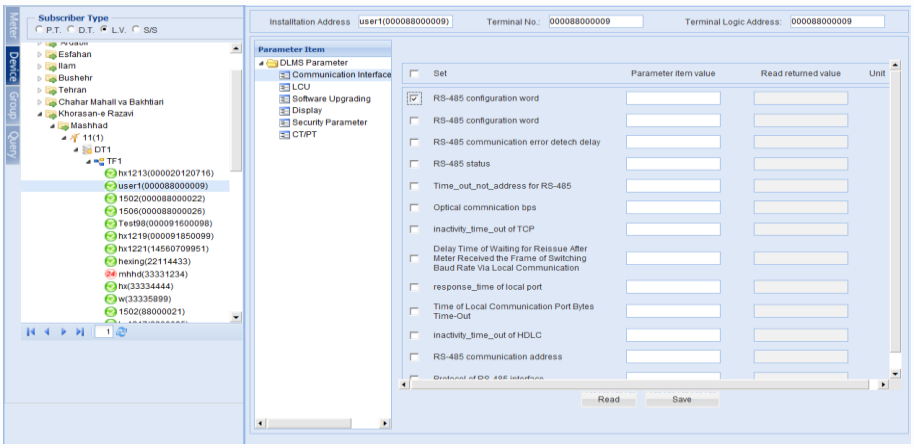


Figure 194 Show the Configuration Details

2. Click “Read” button and it will prompt “Read Timeout(Sec)”. The default time is 45s (the time can be custom settings).

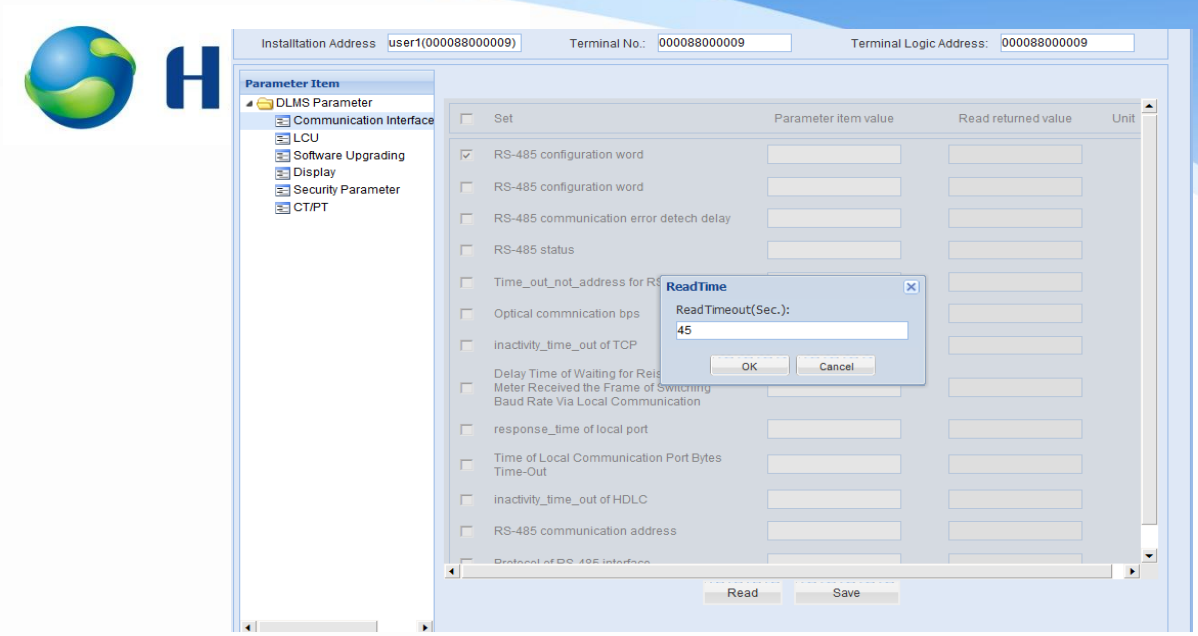


Figure 195 Read Configuration Item

3. Click “OK” button, it will prompt message “please wait, Read progressing”.

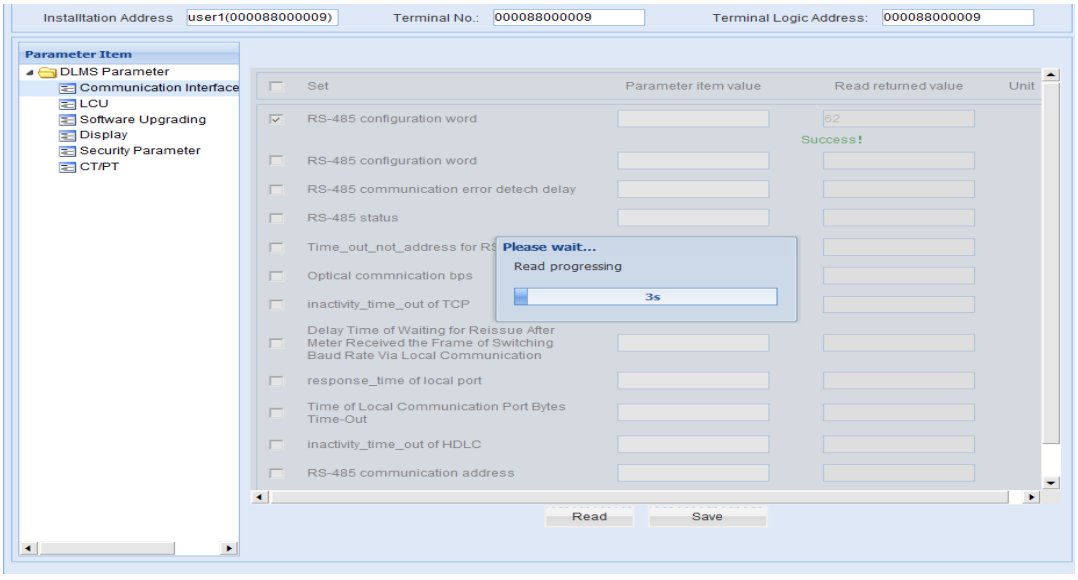


Figure 196 Reading Configuration

4. When reading is successful. It will prompt “Success, Read return value” and the result will be returned and shown.

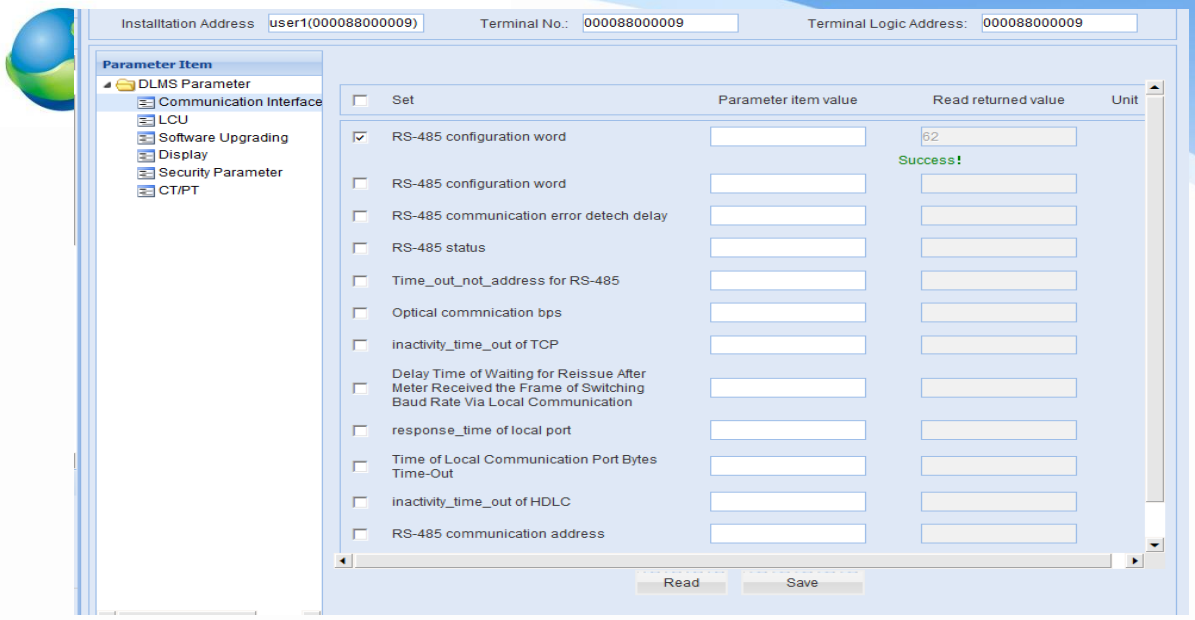


Figure 197 Show the Reading Result

5. Reading timeout

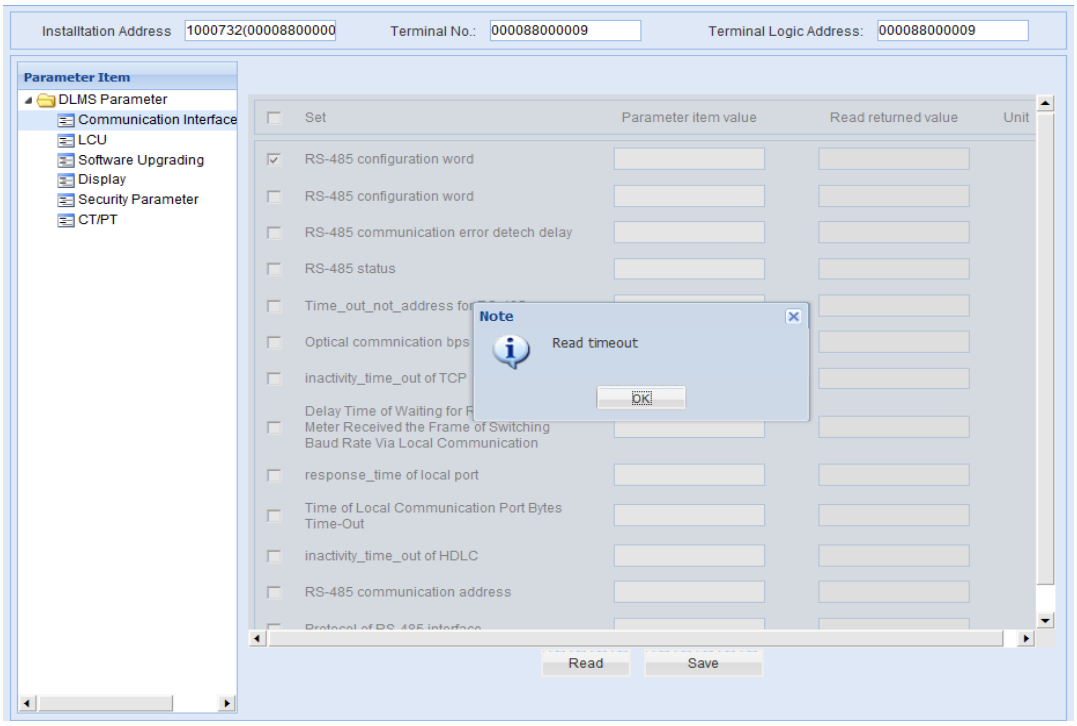


Figure 198 Reading timeout

2) Reading successful, click “save” button, and when the saving is successful, it will prompt “Read result successfully”.

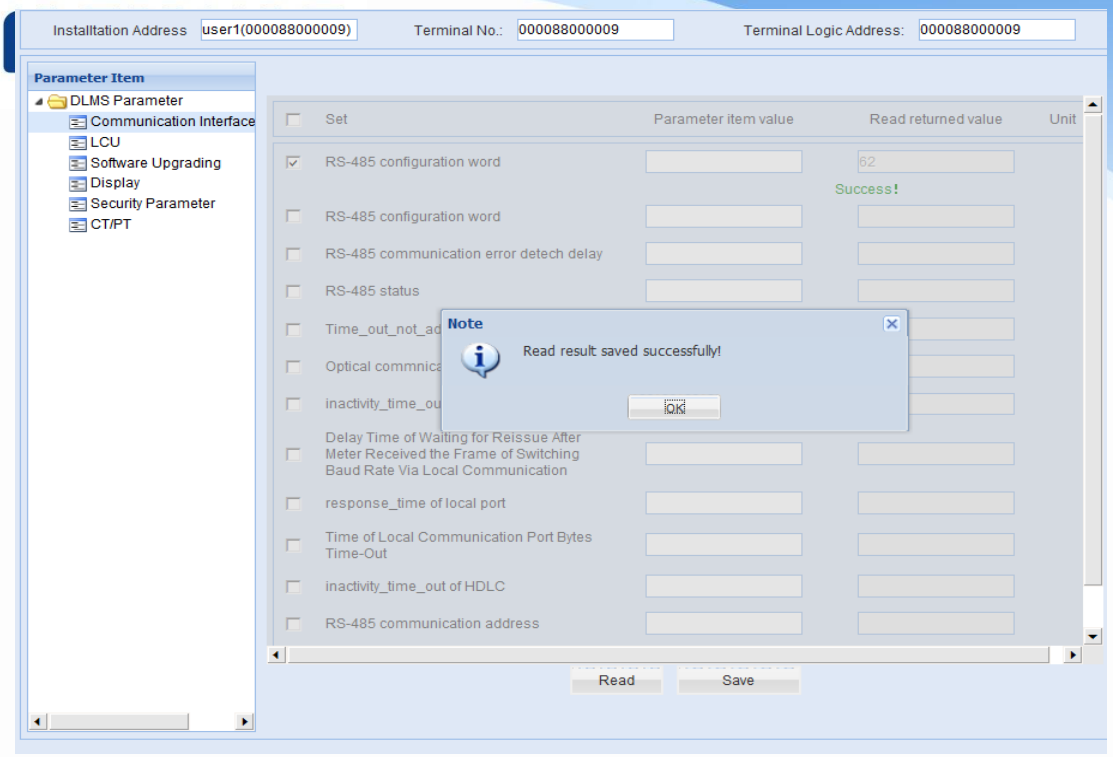


Figure 199 Save the Reading Result

3) When saving is successful, in the parameter item value, the saving result will be shown.

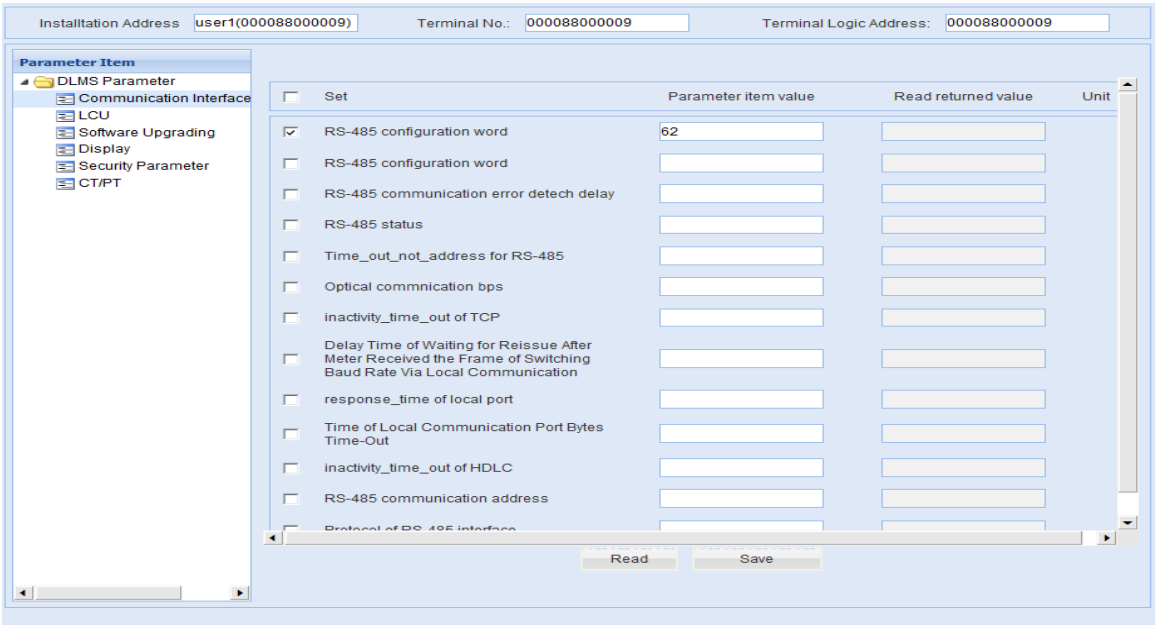


Figure 200 Show Saving Result

10.5. Tariff Management

[Menu] Basic > Parameter Management > Tariff Management

[Function] to set template including day template, week template, season template and holiday Template.

[Step]

Add new tariff: click “Add” button in the tariff interface to enter the Add Tariff interface. Fill in “Tariff Name” and “Remarks”, and click “Save” button.

Figure 201 Add New Tariff

Edit: Click “Query” button in the tariff interface, then choose one tariff, click the edition link and enter the tariff interface.

1.Day Template:

Add New Day Template: in the Daily Template → Day List, click “Add” button to enter the Add Day Template interface. Fill in Name and Remarks, and click “Save” button.

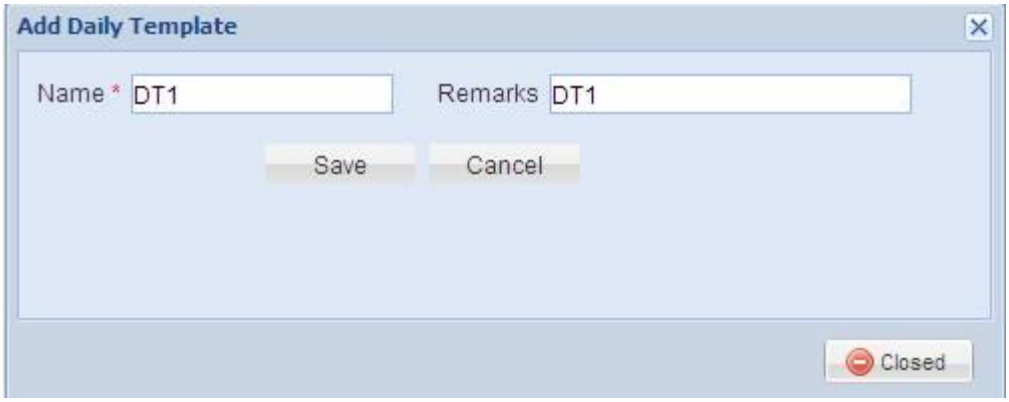


Figure 202 Add New Day Template

Edit Day Template: in the Daily Template → Day List, click “Edit” button to enter the editing interface. Fill in Name and Remarks, click “Save” button to finish editing.

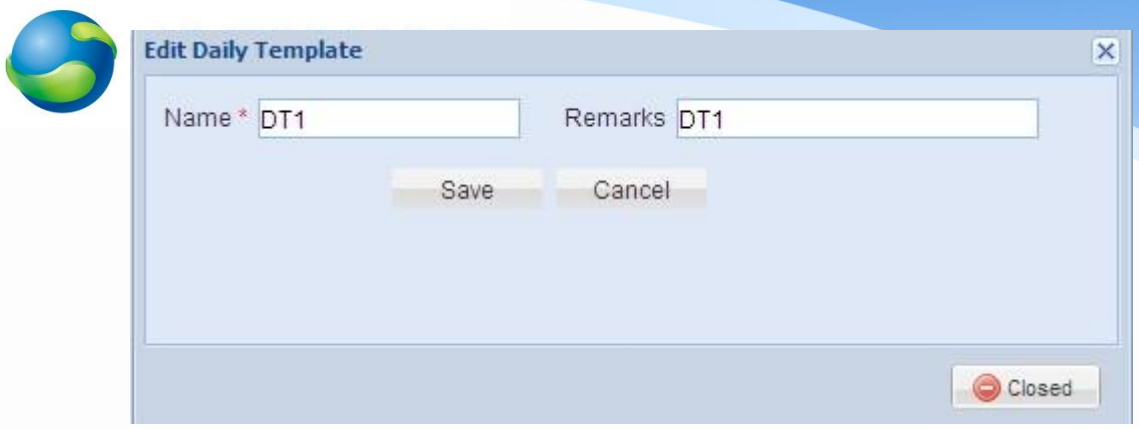


Figure 203 Edit Day Template

Delete Day Template: in the Day Template → Day List, choose one of the DT, and click delete button. Then click "confirm" in the pop-up window.

Add New Time Period Template: in the Day Template → Time Period List, click "Add" button to enter Add Time Period Template interface. Fill in Period Name, Begin Period, and Remarks, and click "Save" button.

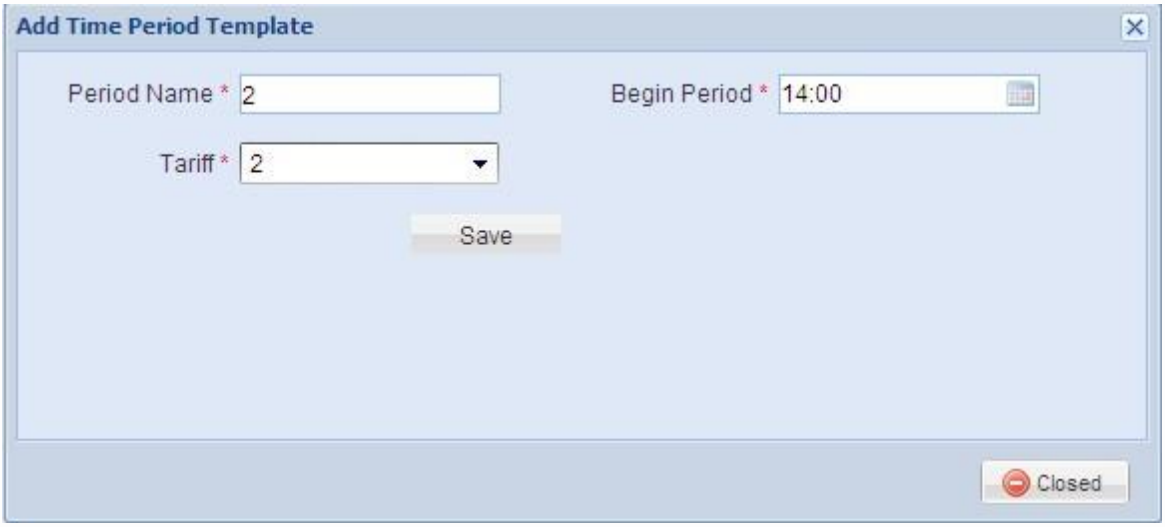


Figure 204 Edit Time Period Template

Delete Time Period: in the Day Template → Time Period List, choose one line, and click "Delete". Click "confirm" button in the pop-up window.

2. Week Template

Add New Week Template: in the Week Template → Week List, click "Add" button to enter the Add Tariff interface. Fill in "Week Name", and choose relevant day template for separately each day "Sun, Mon, Tue, Wed, Thu, Fri, Sat". Then click "Save" button.

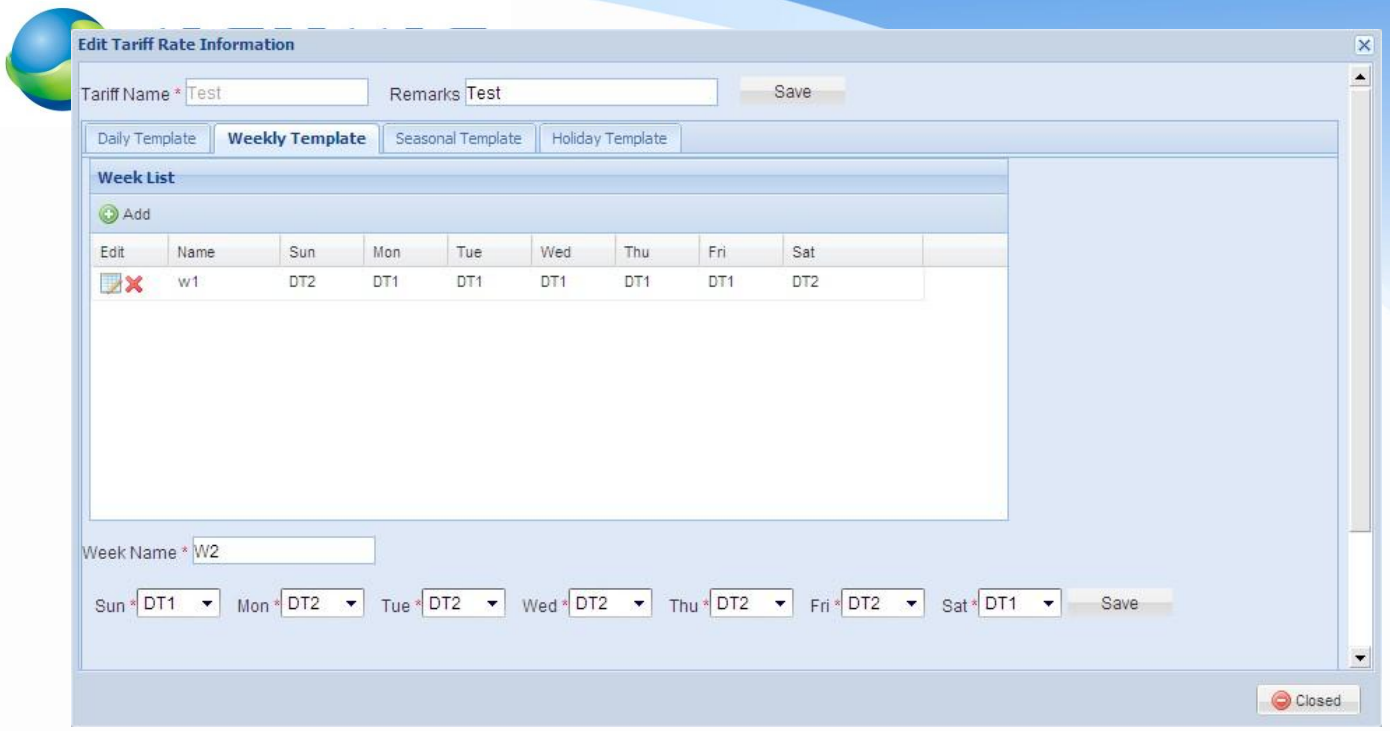


Figure 205 Add New Week Template

Edit: in Week Template→ Week List, choose one week template and click "Edit" link. The edit interface will be shown. Edit "Week Name", and choose relevant day template for separately each day "Sun, Mon, Tue, Wed, Thu, Fri, Sat". Click "Save" button.

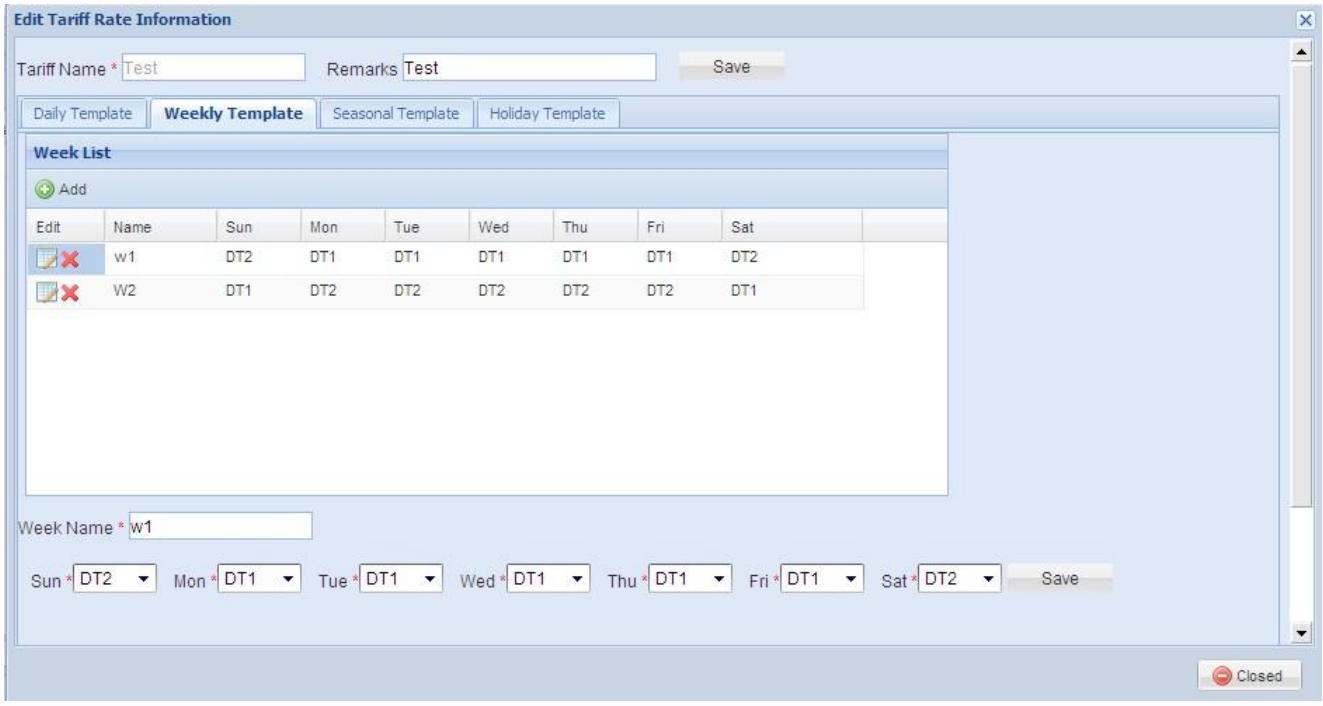


Figure 206 Edit Week Template

Delete: in the Weekly Template →Week List, choose one week template, click

"Delete" link, and click "Confirm" in the pop-up prompt window.

3. Season Template

Add New Season Template: in the Seasonal Template → List of Time Period, click "Add" button to show the new interface. Fill in "Period Name, Start Time, Mon" and choose the relevant "Week Template", then click "Save" button.

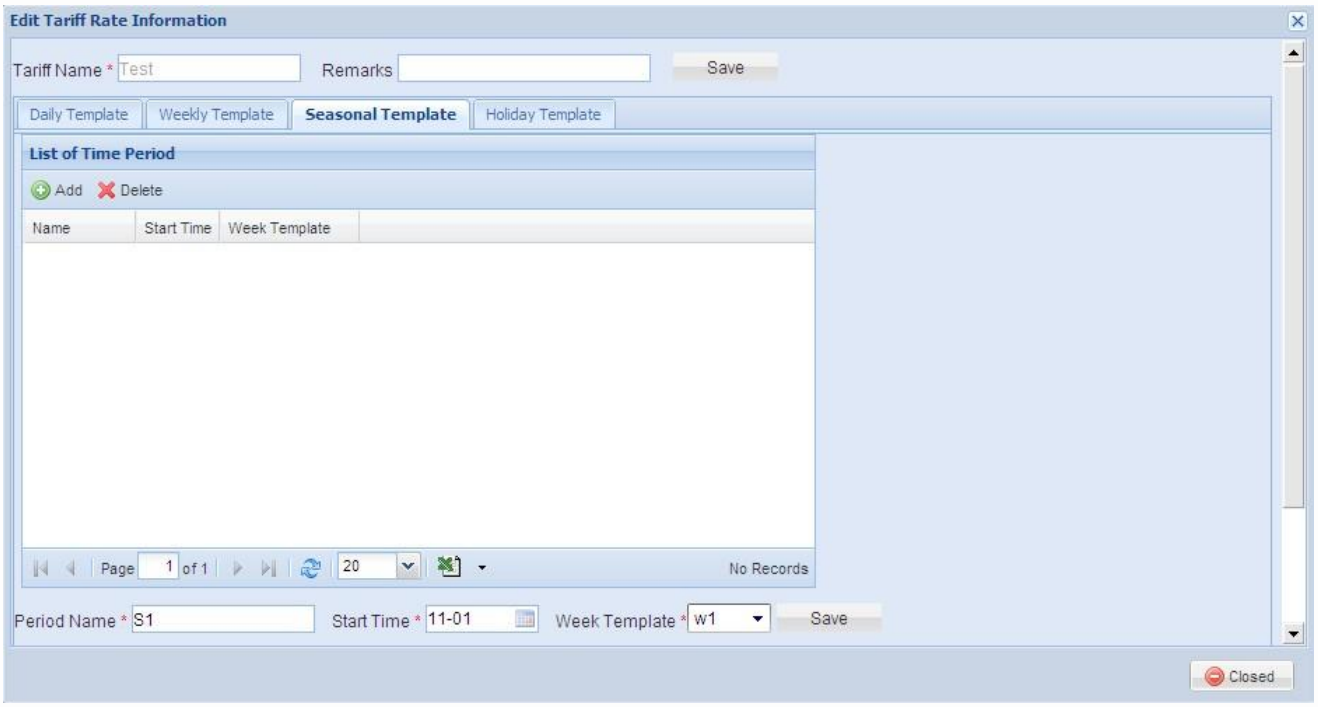


Figure 207 Add New Season Template

Delete: in the Seasonal Template → List of Time Period, choose one line, and click "Delete" link. Click "Confirm" in the pop-up window.

4. Holiday Template

Add New Holiday Template: in the Holiday Template → Holiday List, click "Add" button to show the Add New Holiday Template interface. Fill in the "Holiday Name, Date, and Day Template", click "Save" button.

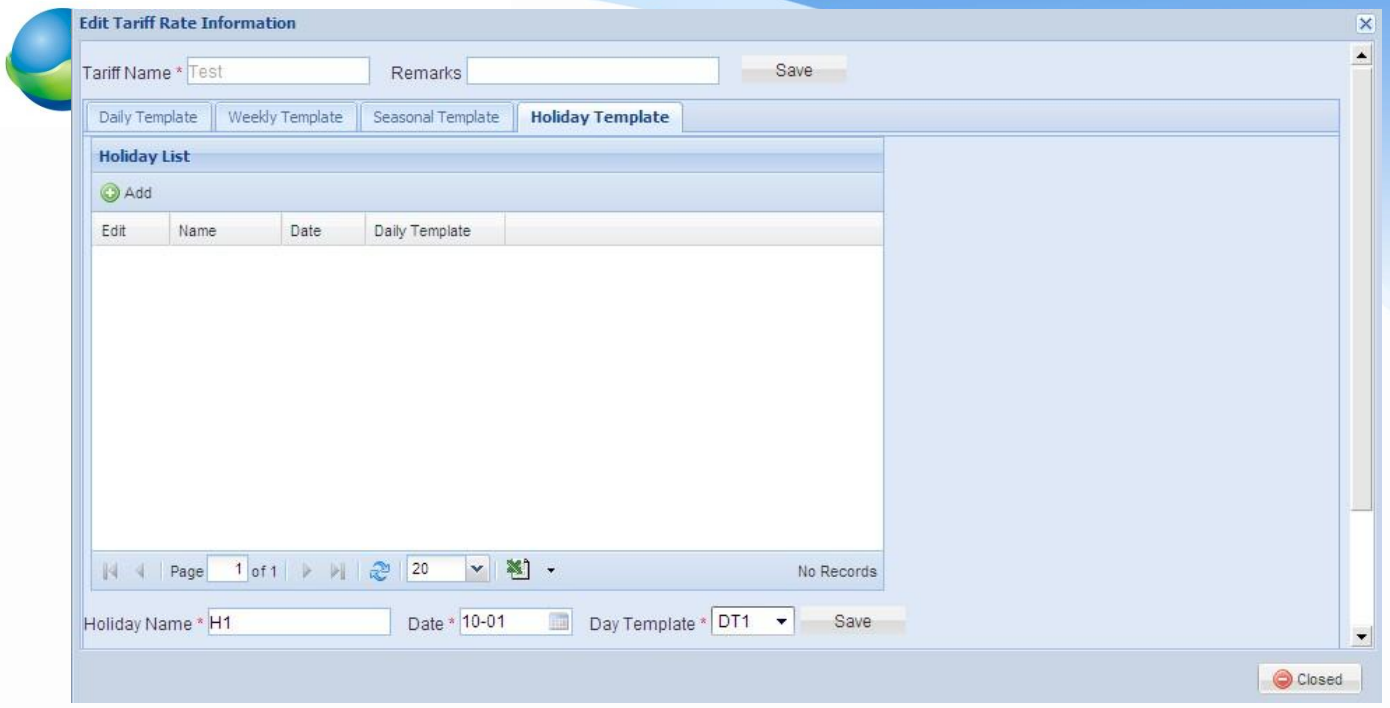


Figure 208 Add New Season Template

Edit: in the Holiday Template → Holiday List, choose one line, click "Edit" link to show the edit interface. Fill in "Holiday Name, Date, and Day Template", and click "Save" button.

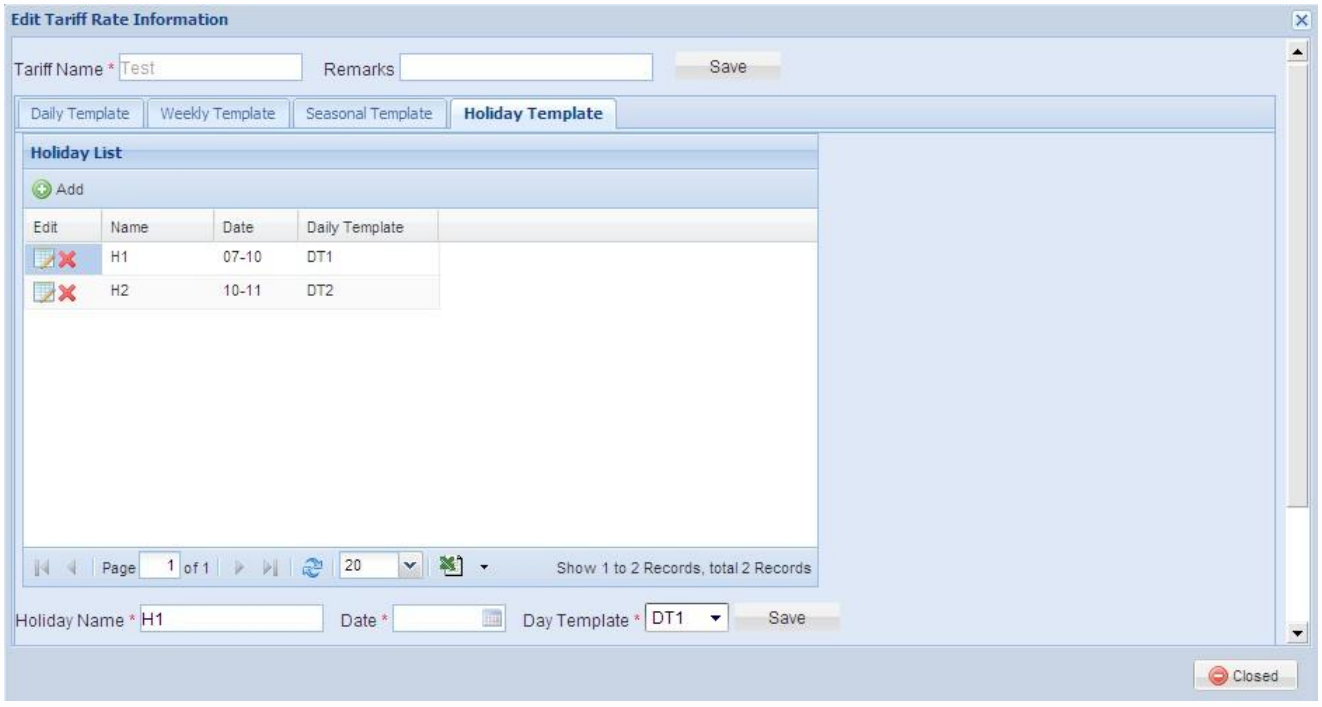


Figure 209 Edit Season Template

Delete: in the Holiday Template → Holiday List, choose one line, click "Delete" link, and click "Confirm" in the pop-up window.

10.6. Tariff Setting

[Menu] Basic > Parameter Management > Tariff Setting

[Function] Set tariff for meter or concentrator (the condition is that tariff template has been configured in advance).

[Step]

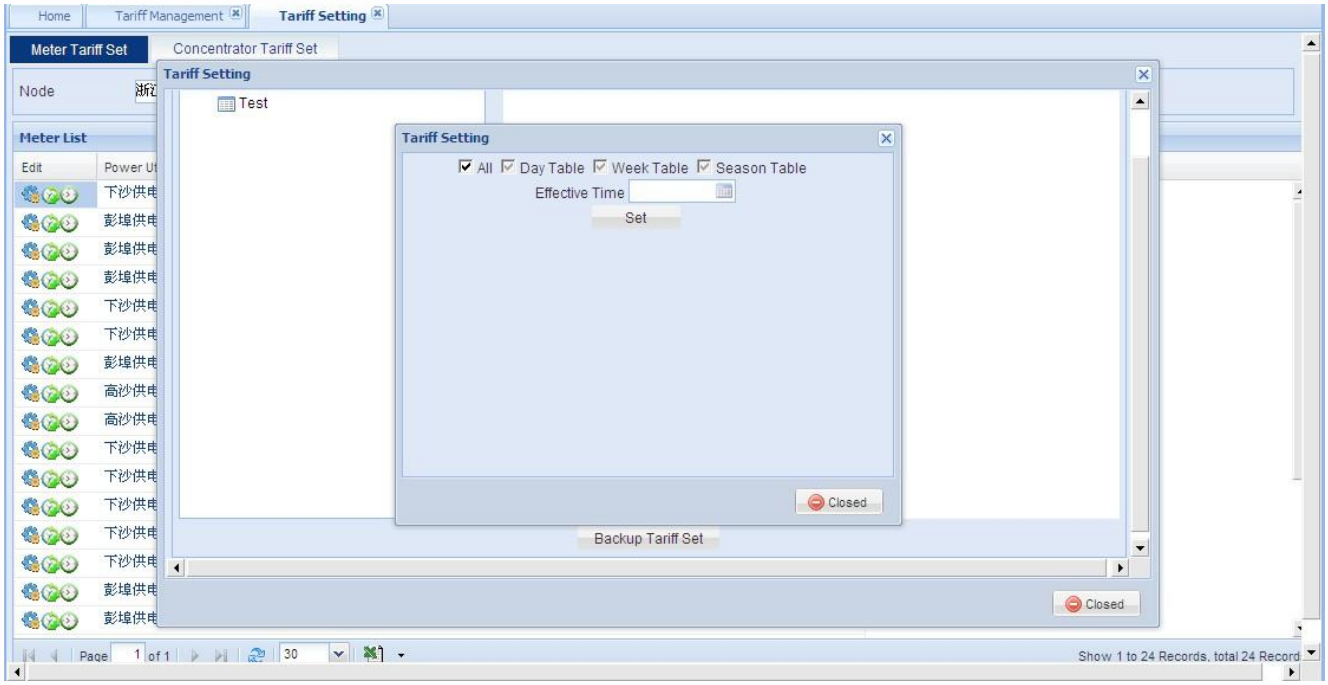
- Set Tariff for Meter

1) Choose terminal

Click equipment in the navigation tree at left, choose the right equipment that need to set tariff.

2) Set Tariff

Click "Set Tariff", and the tariff setting interface will pop up. Choose tariff template in the left tree. Click "Backup Tariff Set" button, and a new window will pop up for choosing setting template and effective time. Click "Set" button to set tariff to the meter.



Picture 20.4.1 Set Tariff

- Set Tariff for Concentrator

1) Choose Terminal

Click equipment in the navigation tree at left, choose the right equipment that need

to set tariff.

2) Set Tariff

Click “Set Tariff”, and the tariff setting interface will pop up. Choose one tariff template, and click “Confirm” button. Choose meters that need to set tariff (multiple meters can be selected). Click “Batch Tariff Update” to set tariff for a group of meters. Click “Set tariff” to set single tariff .

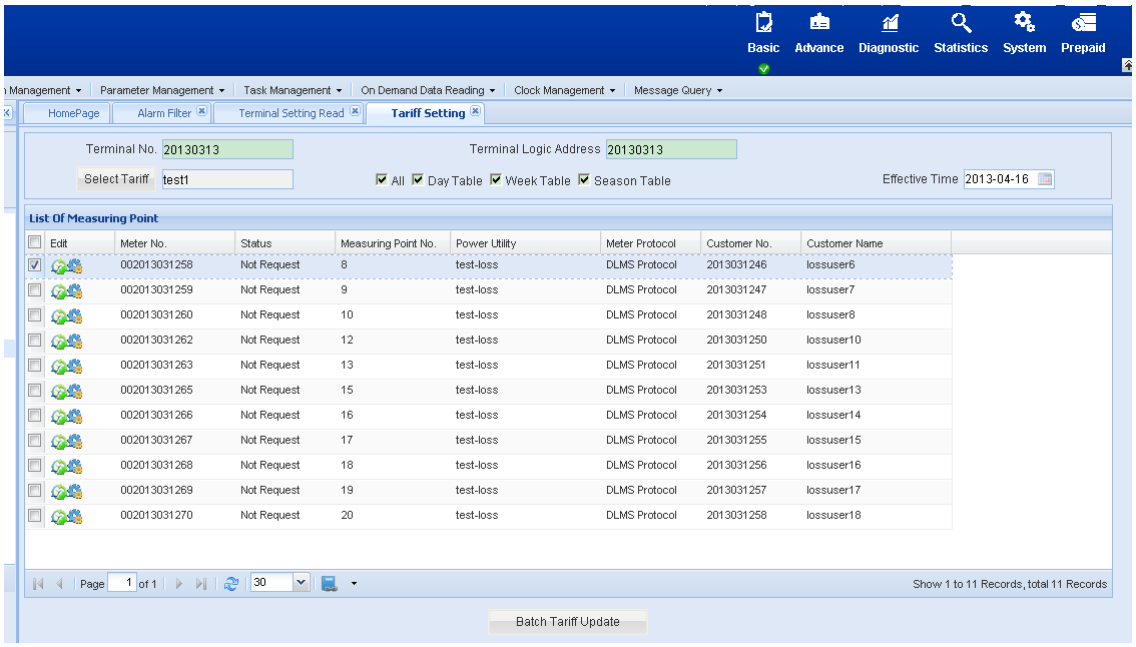

Basic
Advance
Diagnostic
Statistics
System
Prepaid
Parameter Management
Task Management
On Demand Data Reading
Clock Management
Message Query
HomePage
Alarm Filter
Terminal Setting Read
Tariff Setting
Terminal No. 20130313
Terminal Logic Address 20130313
Select Tariff test1
All Day Table Week Table Season Table
Effective Time 2013-04-16
List Of Measuring Point
Edit Meter No. Status Measuring Point No. Power Utility Meter Protocol Customer No. Customer Name
002013031258 Not Request 8 test-loss DLMS Protocol 2013031246 lossuser6
002013031259 Not Request 9 test-loss DLMS Protocol 2013031247 lossuser7
002013031260 Not Request 10 test-loss DLMS Protocol 2013031248 lossuser8
002013031262 Not Request 12 test-loss DLMS Protocol 2013031250 lossuser10
002013031263 Not Request 13 test-loss DLMS Protocol 2013031251 lossuser11
002013031265 Not Request 15 test-loss DLMS Protocol 2013031253 lossuser13
002013031266 Not Request 16 test-loss DLMS Protocol 2013031254 lossuser14
002013031267 Not Request 17 test-loss DLMS Protocol 2013031255 lossuser15
002013031268 Not Request 18 test-loss DLMS Protocol 2013031256 lossuser16
002013031269 Not Request 19 test-loss DLMS Protocol 2013031257 lossuser17
002013031270 Not Request 20 test-loss DLMS Protocol 2013031258 lossuser18
Page 1 of 1
30
Show 1 to 11 Records, total 11 Records
Batch Tariff Update

Figure 210 Set Tariff for Concentrator

10.7. Meter Control Command

[Menu] Basic > Parameter Management > Meter Control Command

[Function] Remote control for the terminal

[Step]

1) Select the terminals of different protocols in the equipment tree, and enter the relevant terminal alarm filter interface. get the relevant terminal bureau No, terminal logical address, user number, user name, all the identity points and relevant command list;

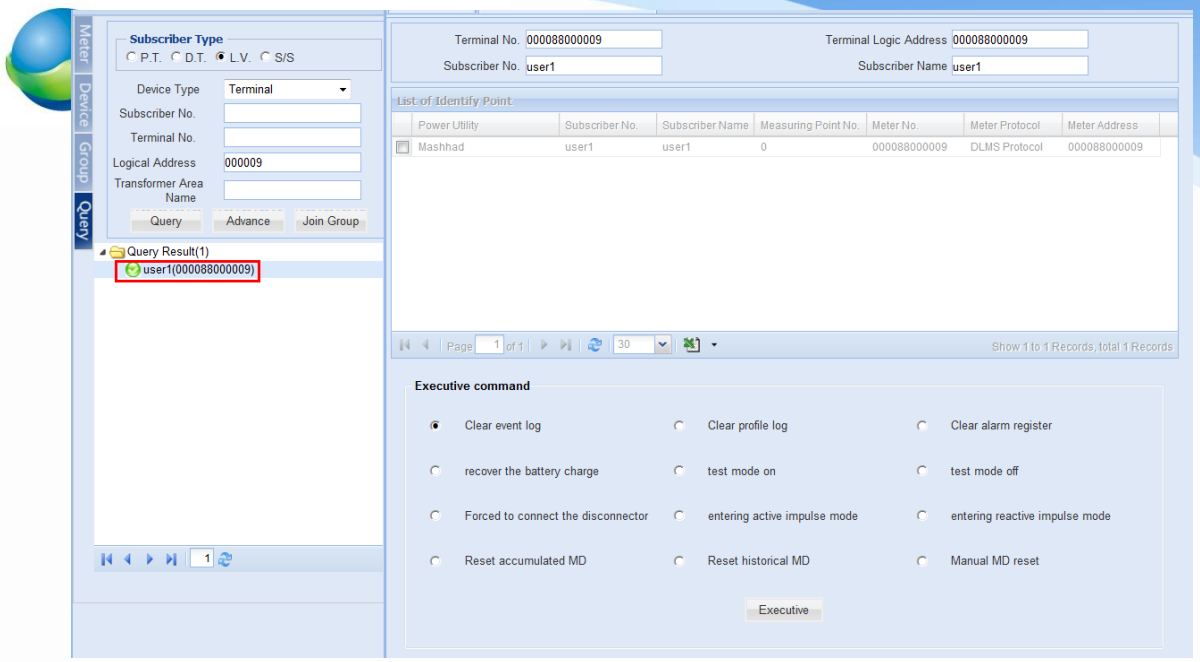


Figure 211 Choose Concentrator

2) Execution: choose identity points, select the command, and click “Execute” button;

Note!

1) Here it only supports identity points under DLMS protocol, and the DMLS identity points under China Grid protocol.

1. DLEMS protocol terminal: can control the terminal itself.
2. China Grid protocol: only supports controlling the identity points of DLMS protocol under it.

Below is an example with DLMS protocol Terminal:

1. Choose DLMS terminal in the equipment tree, and choose the relevant command.

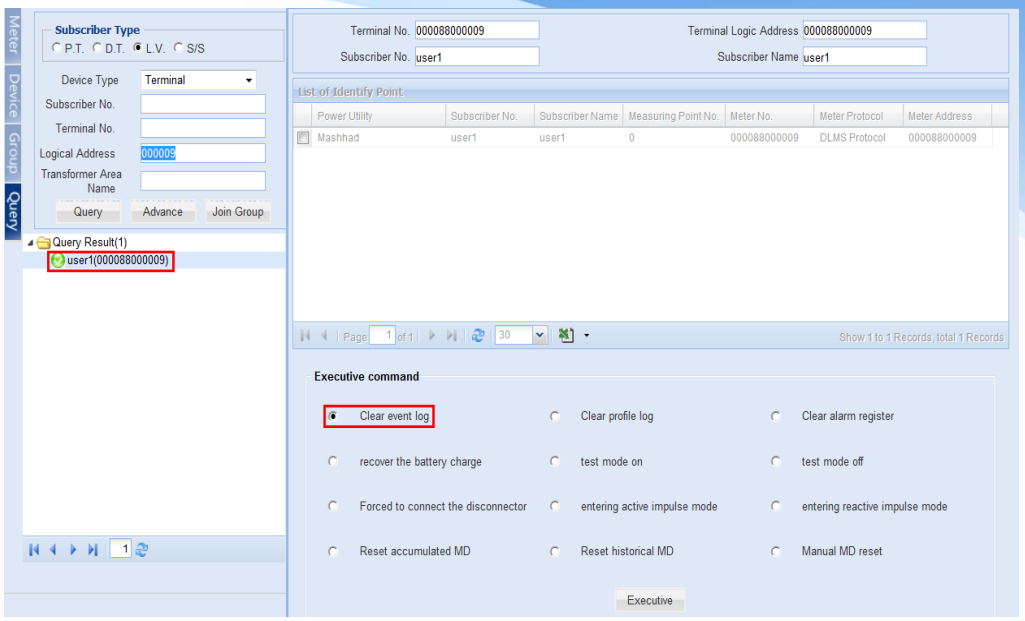


Figure 212 Select Specified Command

2. Click “Execute” button, it will pop up a confirmation window, asking whether to execute the command or not.

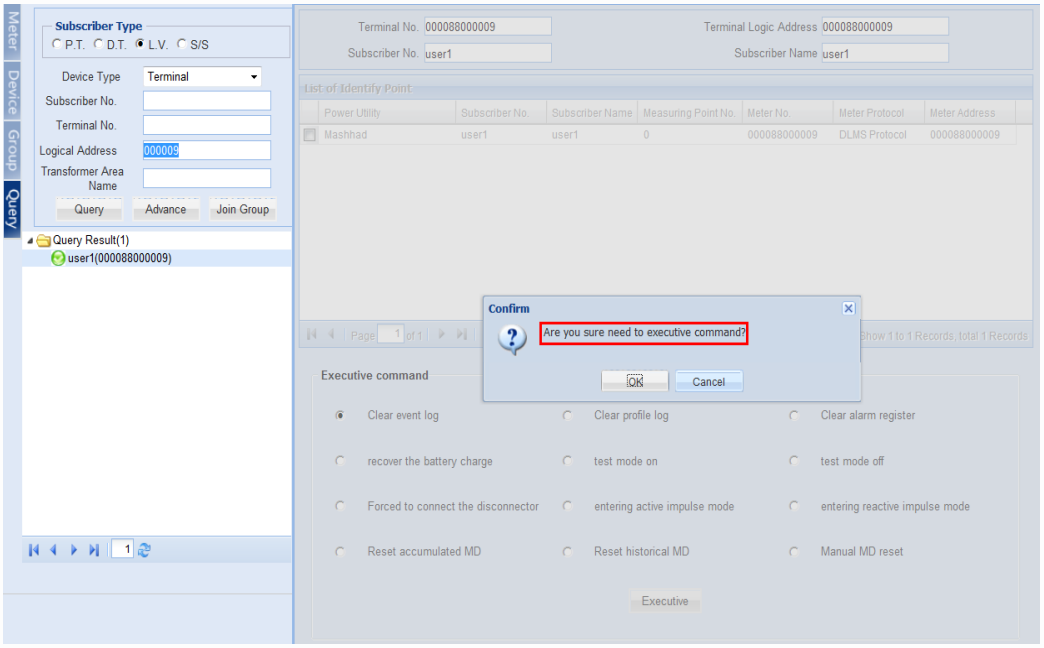


Figure 213 Execute Confirmation Command

3. Click “OK” button and it will prompt “Set Executive Command Time(Sec)”. The default time is 45s (the time can be custom settings).

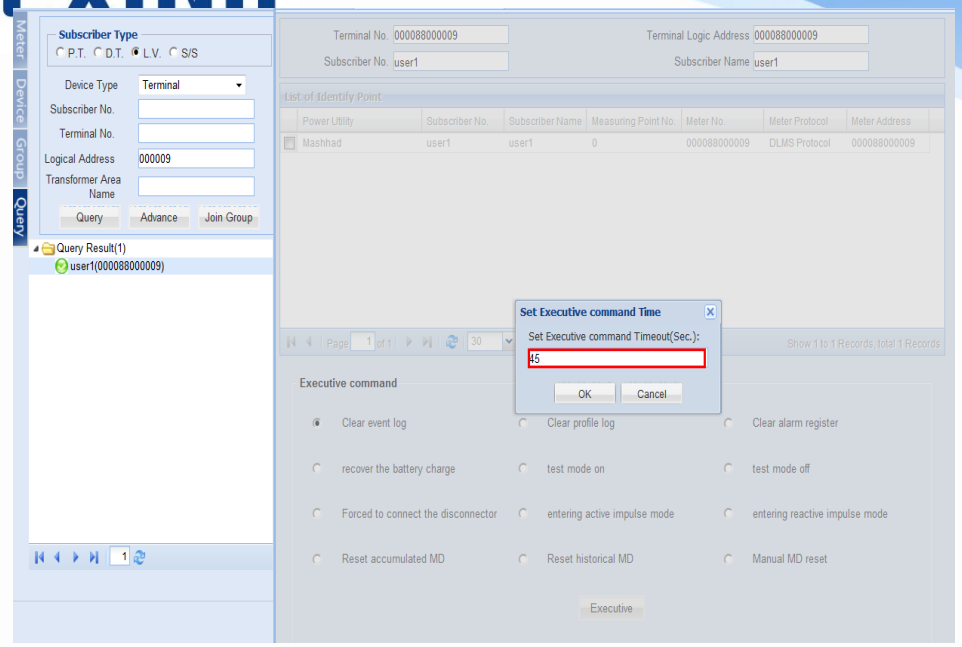


Figure 214 Set Time Period

4. Click “OK” button, it will prompt message “Please wait, Set Executive command progressing”.

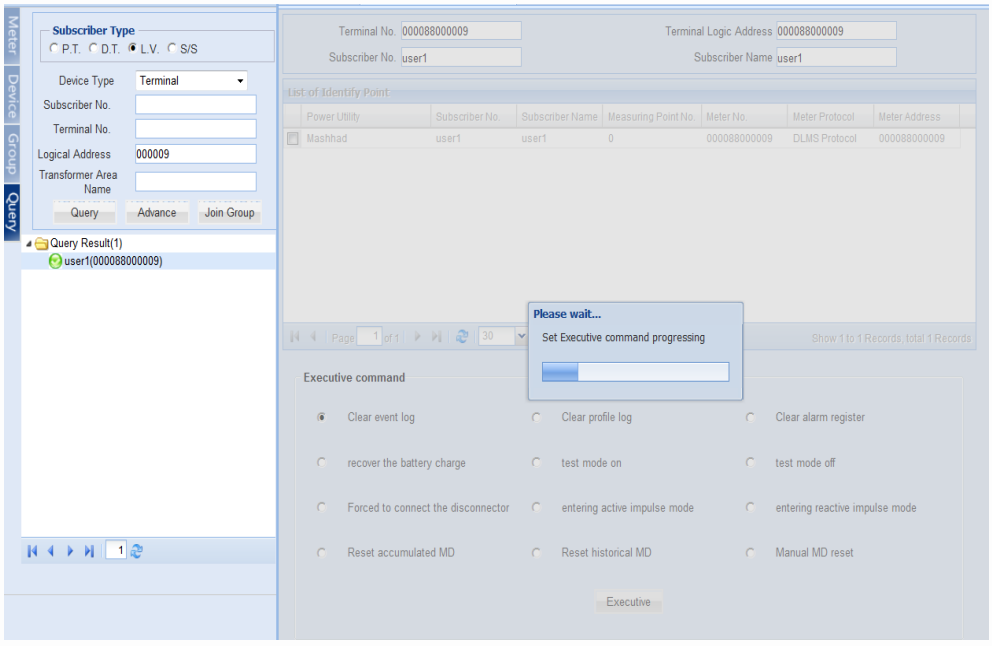


Figure 215 Execute Command

5. Execute successfully. It will pop up a prompt window.

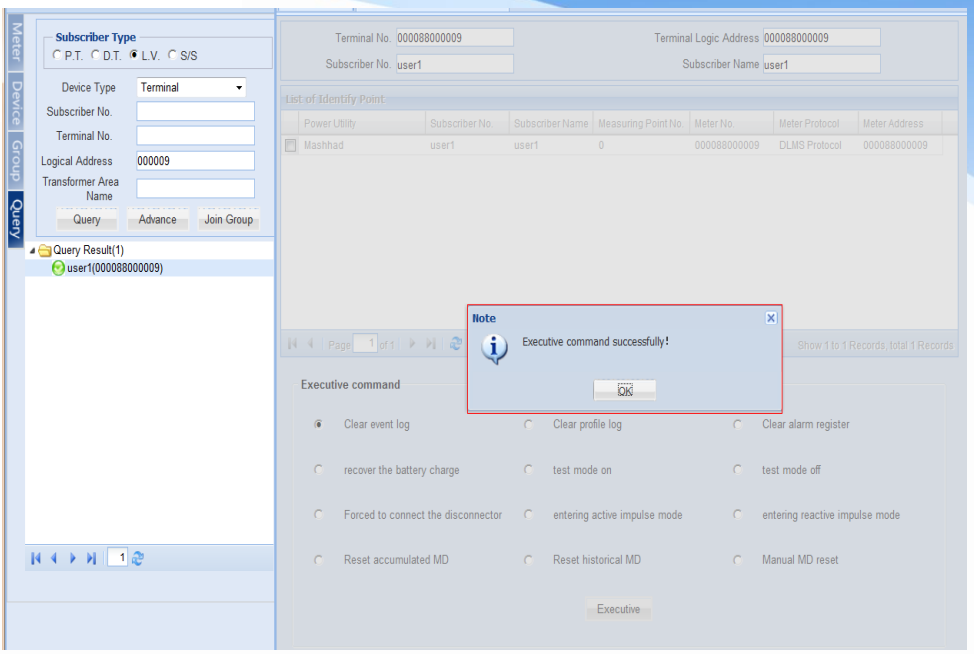


Figure 216 Execute Successfully

6. Reading overtime, it will prompt message “Set Executive timeout”.

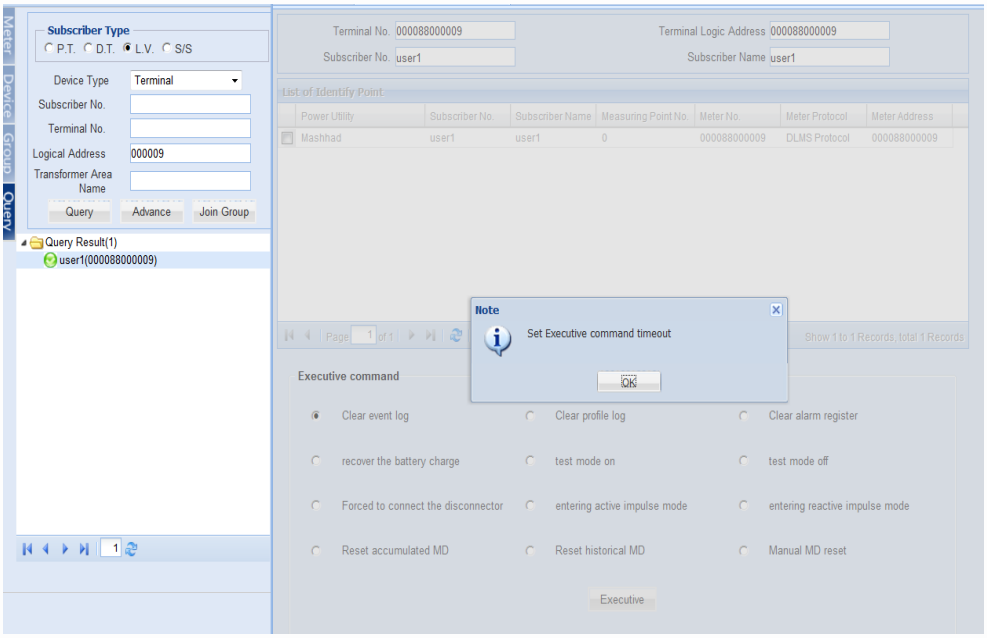


Figure 217 Timeout Interface

11. Load Control

11.1. Remote Control

[Menu] Advance>Load Control > Remote Control

[Function] Remote Control of Meter

[Step]

1. Select equipment node (on line equipment) at the left, the equipments includes: GPRS meter and concentrator.

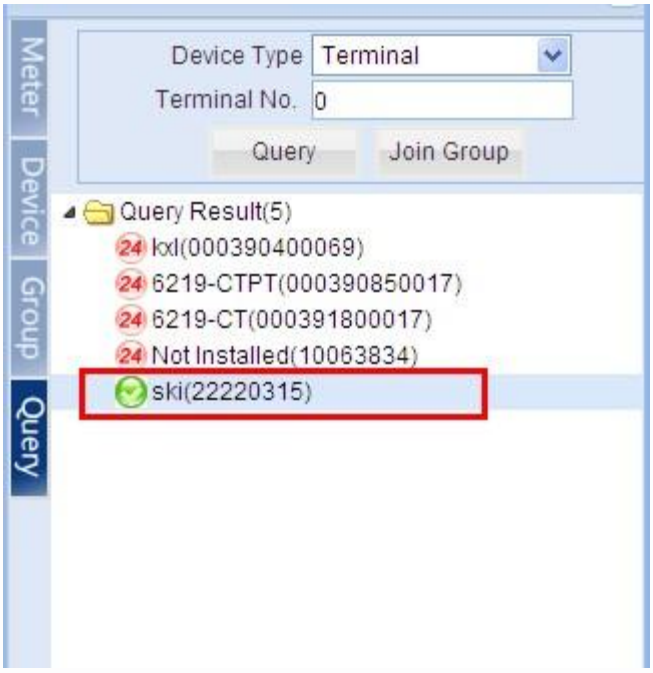


Figure 218 Select Terminal

2. Select the Meters that need to operate in the list at the main window at right.

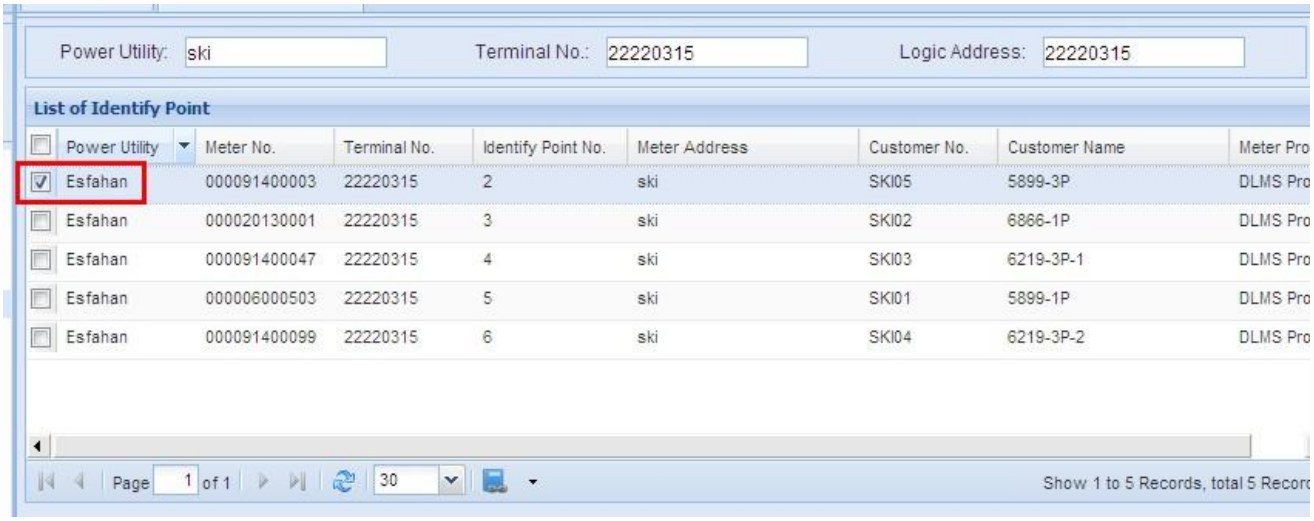

Power Utility: ski
Terminal No.: 22220315
Logic Address: 22220315
List of Identify Point
Power Utility | Meter No. | Terminal No. | Identify Point No. | Meter Address | Customer No. | Customer Name | Meter Pro
Esfahan | 000091400003 | 22220315 | 2 | ski | SKI05 | 5899-3P | DLMS Pro
Esfahan | 000020130001 | 22220315 | 3 | ski | SKI02 | 6866-1P | DLMS Pro
Esfahan | 000091400047 | 22220315 | 4 | ski | SKI03 | 6219-3P-1 | DLMS Pro
Esfahan | 000006000503 | 22220315 | 5 | ski | SKI01 | 5899-1P | DLMS Pro
Esfahan | 000091400099 | 22220315 | 6 | ski | SKI04 | 6219-3P-2 | DLMS Pro
Page 1 of 1
30
Show 1 to 5 Records, total 5 Record

Figure 219 Select Meter

3. Read or Set Parameters

1)Relay Status

Read: tick the relevant status parameter and click “Read” button to read the relay status.

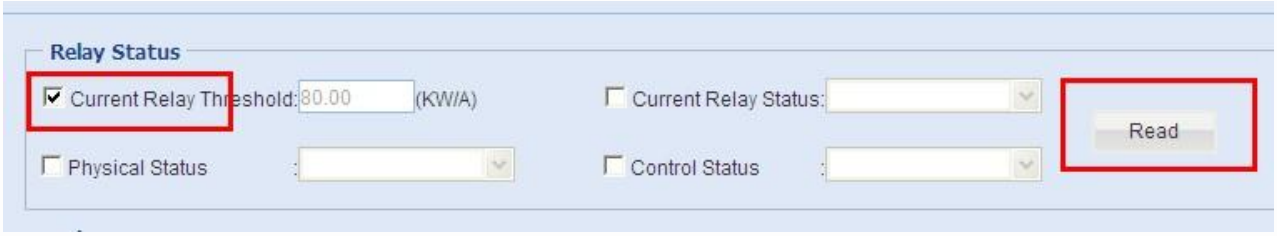


Figure 220 Read Relay Status

2)Relay Parameter Set

Read: Tick the relevant relay parameters and click “Read”.

Figure 221 Read Relay Parameters

Set: Tick the relevant relay parameters, select or input the data that need to set, and click “Set”.

Figure 222 Set Relay Parameter

3)Relay Control

Select “disconnect” or “connect” at Relay Movement, and then click “Execute” to disconnect or connect the relay.

Figure 223 Relay Control

4)Preset Operation of Relay

Read: Click “Read” button.

Figure 224 Relay and Operating Parameter Reading

Set: Select “disconnect” or “connect” at Preset Movement, set “Execution Time” value, and then click “Set” button.

Figure 225 Relay and Operating Parameter Setting

11.2. Load Template

[Menu] Advance>Load Control >Load Template

[Function] Load Control Template Management

[Step]

1. Add:

1)In Load Template List, select blank value(Please Select);

2)In Template Content, input information for "Template Name, Threshold Table, Min. Time of Exceeding Threshold, Interval Time of Reconnection, Times of Reconnection, Clear Counting Time, Using Status, Comment(optional)";

3)Click "Add" button;

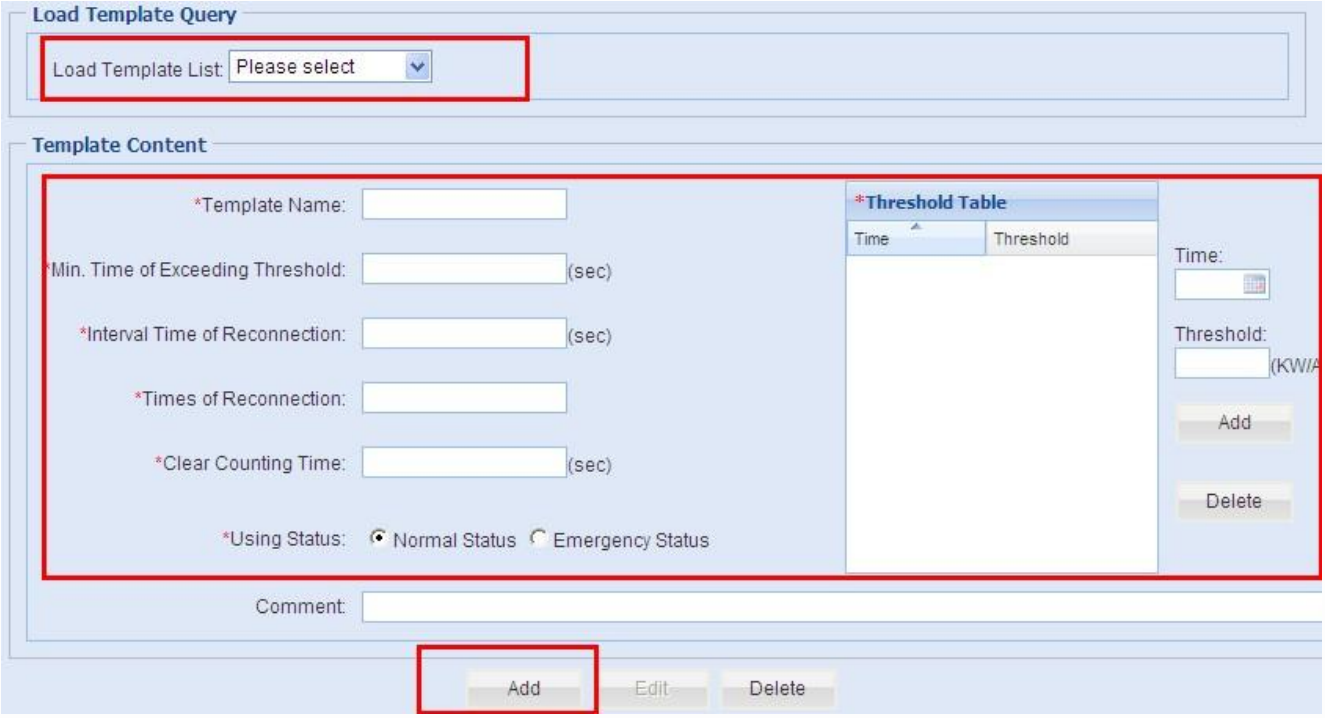


Figure 226 Add New Normal Status Load Template

4)Choose different "Using Status". If you choose Emergency Status, some new items will appear, such as "Emergency Status Group, Emergency ID, Start Time of Emergency Status, Duration of Emergency Status".

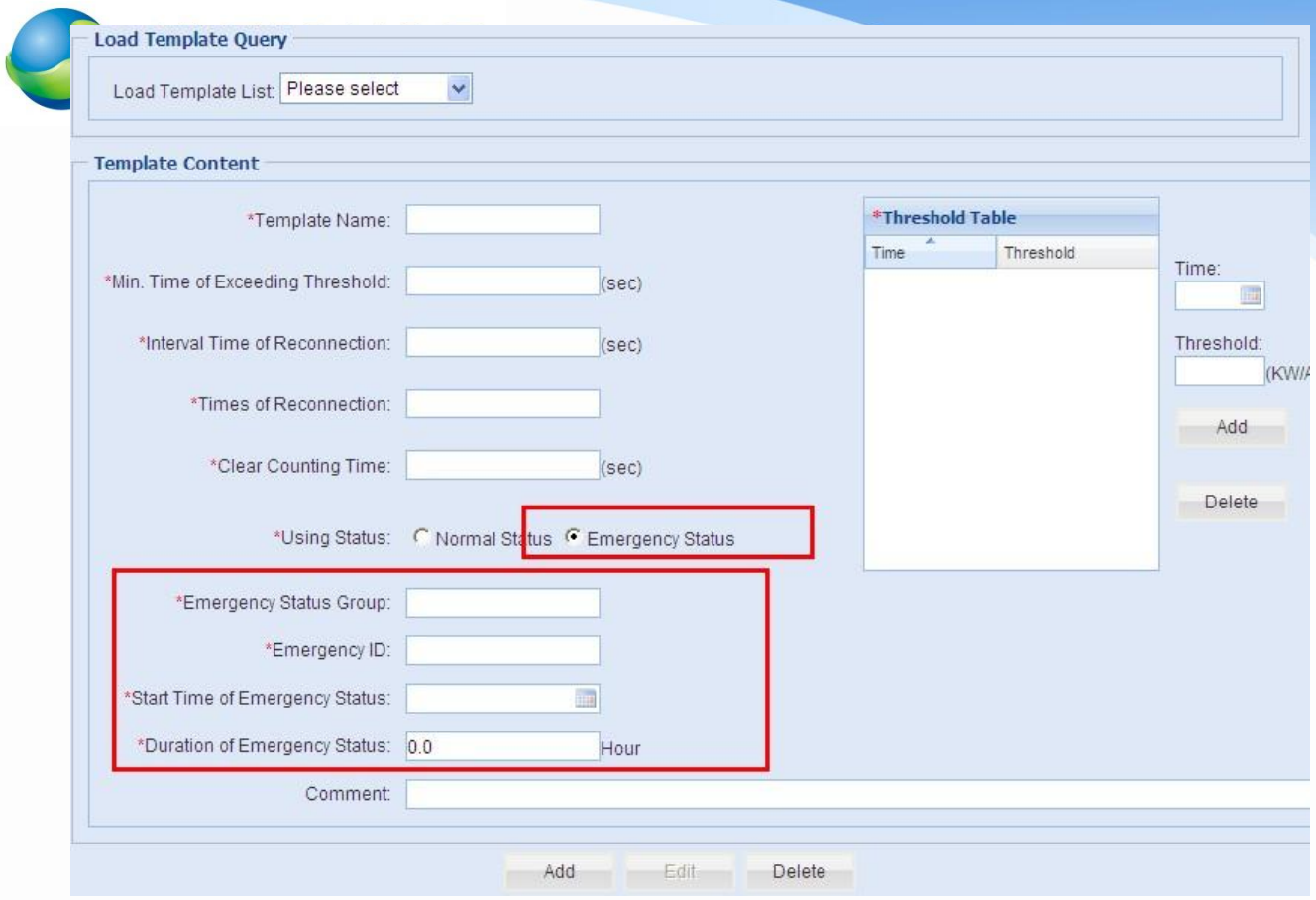


Figure 227 Add New Emergency Status Load Template

5)Before adding the template, below prompt dialog will pop up. Select “OK”.

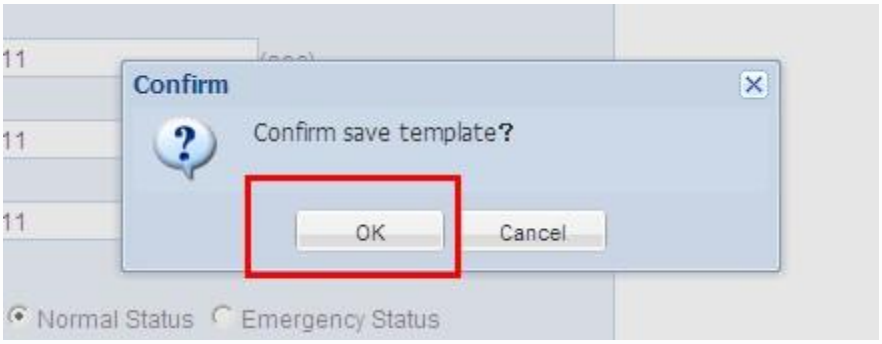


Figure 228 Prompt Dialog for Adding Load Control Template

6) Below prompt message will appear when the adding of template is finished.

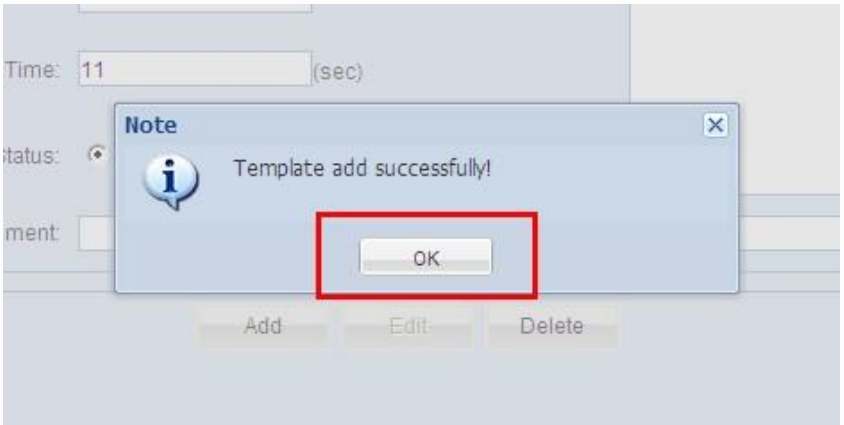


Figure 229 Add Load Control Template Successfully

2. Query Template Details:

Go to Load Template Query→Load Template List, choose the template name that need to query. Then the details of the template will be shown in the Template Content.

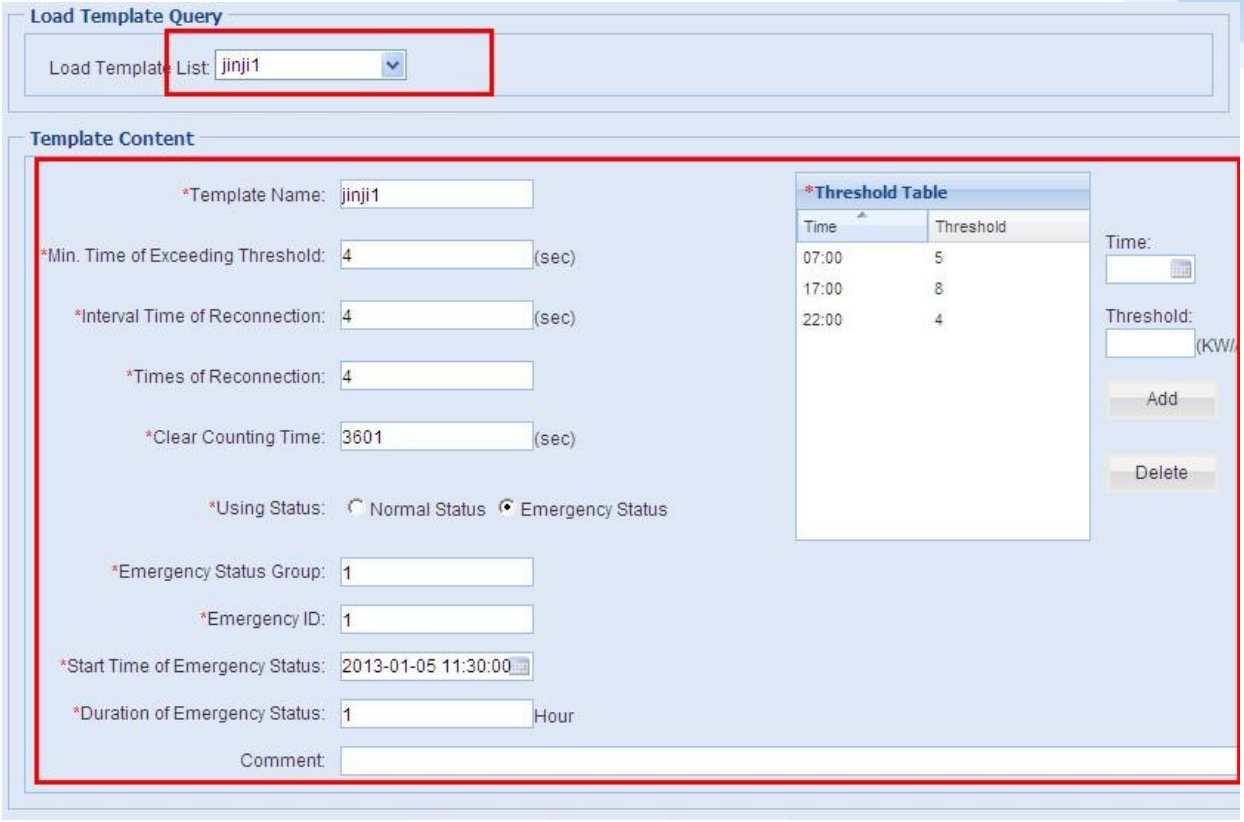


Figure 230 Query Load Template

3. Modify:

Go to Load Template Query→Load Template List, choose the template names that need to modify. And then modify the information in the Template Content Query, and click Edit button.

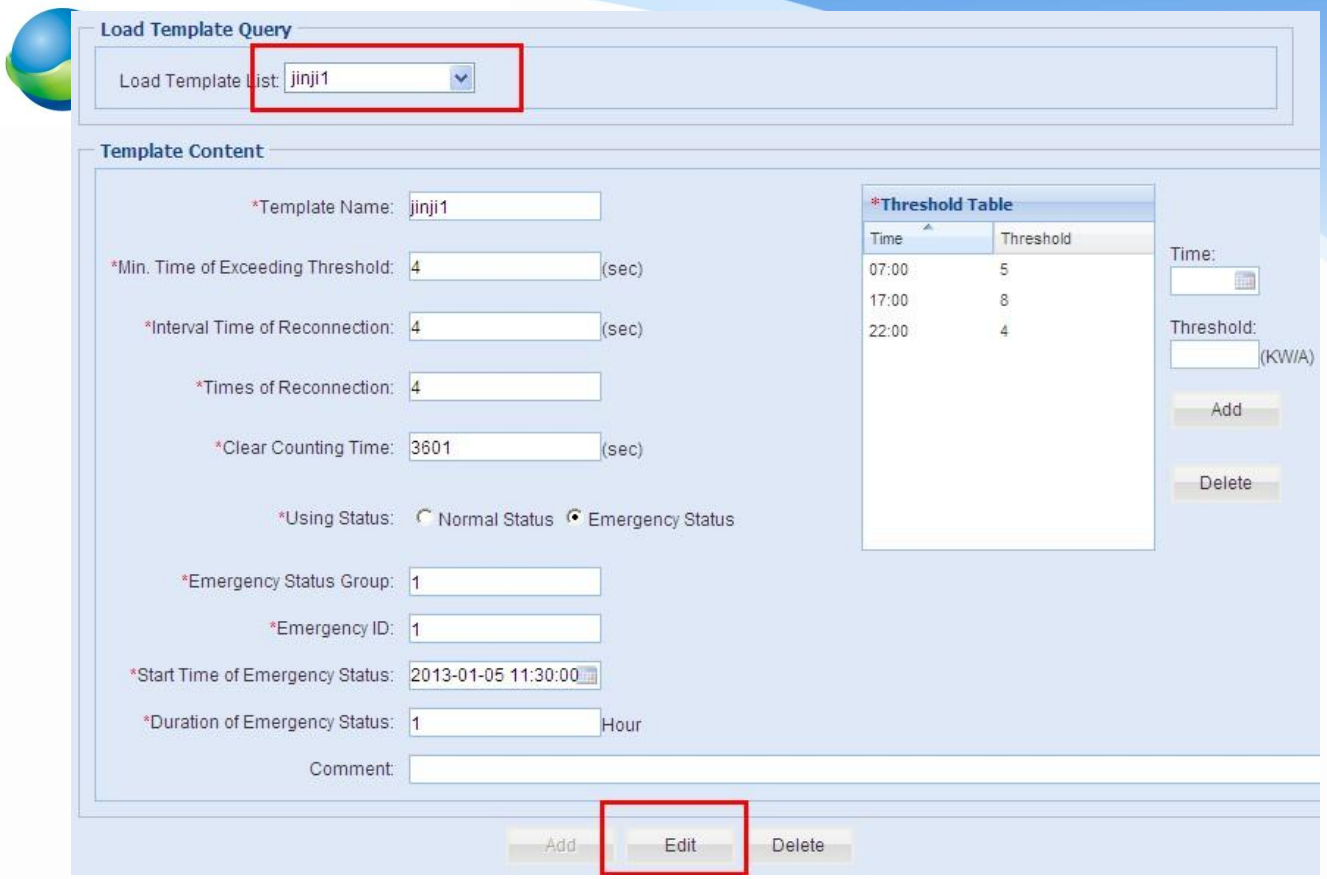


Figure 231 Modify Load Template

4. Delete:

Go to Load Template Query→Load Template List, choose the template names that need to be deleted, and click "Delete" button.

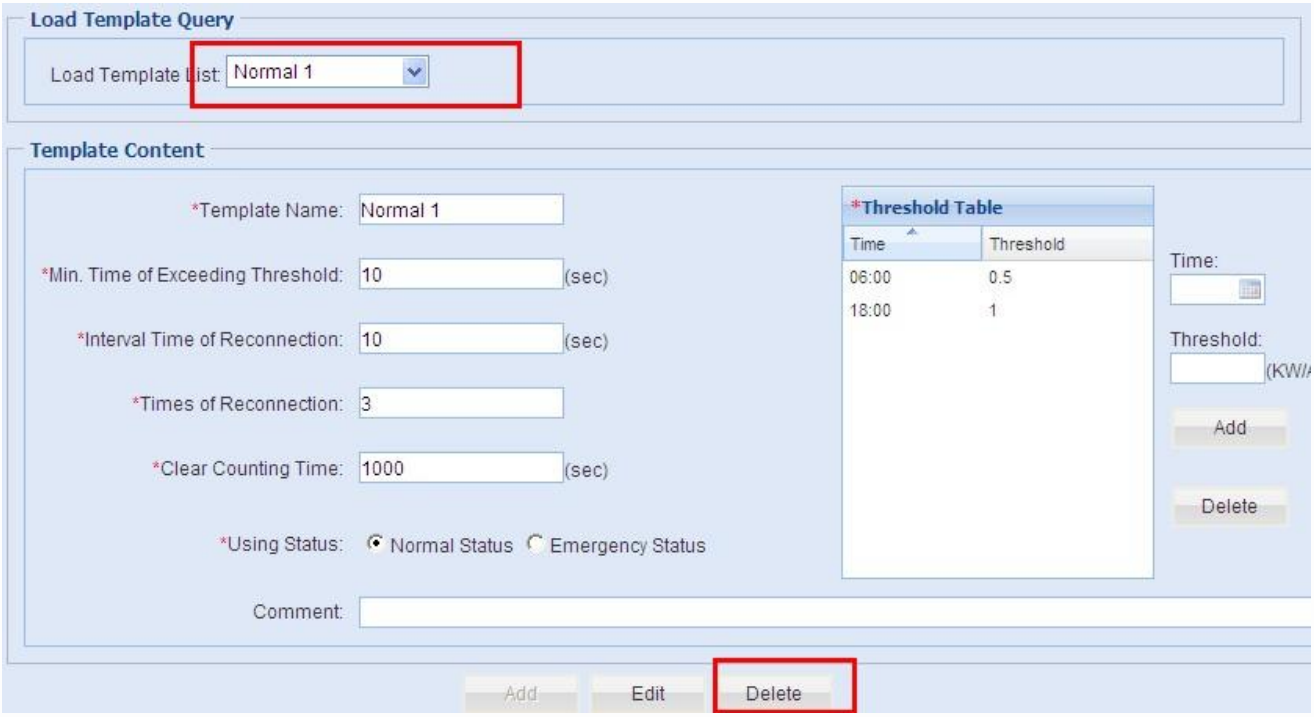


Figure 232 Delete Load Template

11.3. Load Control

[Menu] Advance>Load Control >Load Control
[Function] to control the load of users
[Step]
1, Select equipment node (on line equipment) at the left, the equipments includes: GPRS meter and concentrator.

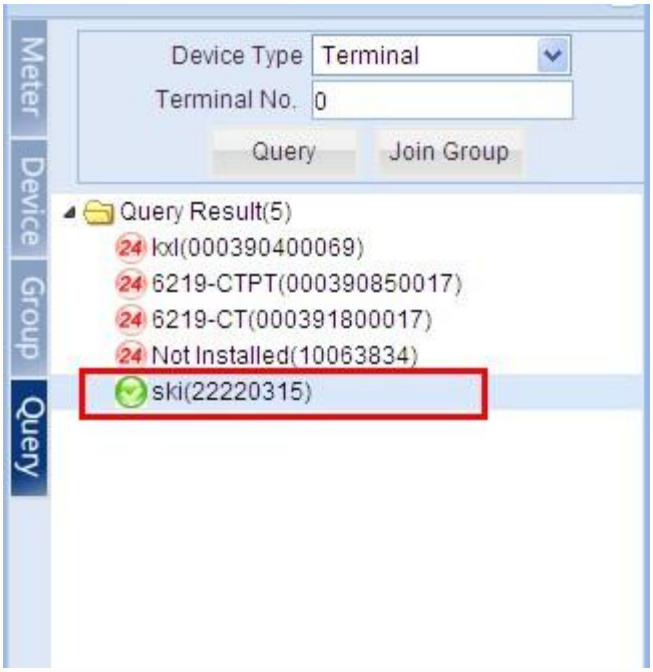


Figure 233 Select Terminal

2, Select the Meters that need to operate in the list at the main window at right.

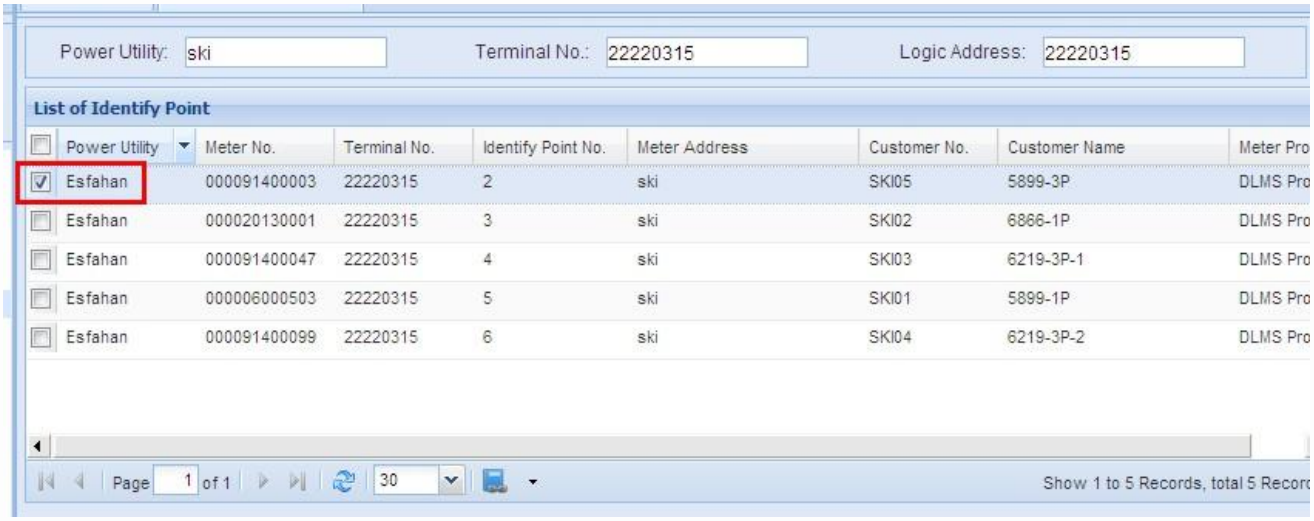

Power Utility: ski
Terminal No.: 22220315
Logic Address: 22220315
List of Identify Point
Power Utility
Meter No.
Terminal No.
Identify Point No.
Meter Address
Customer No.
Customer Name
Meter Pro
Esfahan 000091400003 22220315 2 ski SKI05 5899-3P DLMS Pro
Esfahan 000020130001 22220315 3 ski SKI02 6866-1P DLMS Pro
Esfahan 000091400047 22220315 4 ski SKI03 6219-3P-1 DLMS Pro
Esfahan 000006000503 22220315 5 ski SKI01 5899-1P DLMS Pro
Esfahan 000091400099 22220315 6 ski SKI04 6219-3P-2 DLMS Pro
Page 1 of 1
30
Show 1 to 5 Records, total 5 Record

Figure 234 Select Meter

3, Read or Set Parameters

1) Read: tick the relevant parameter type(Normal Status or Emergency Status), tick

the parameter that need to read and click “Read” button.

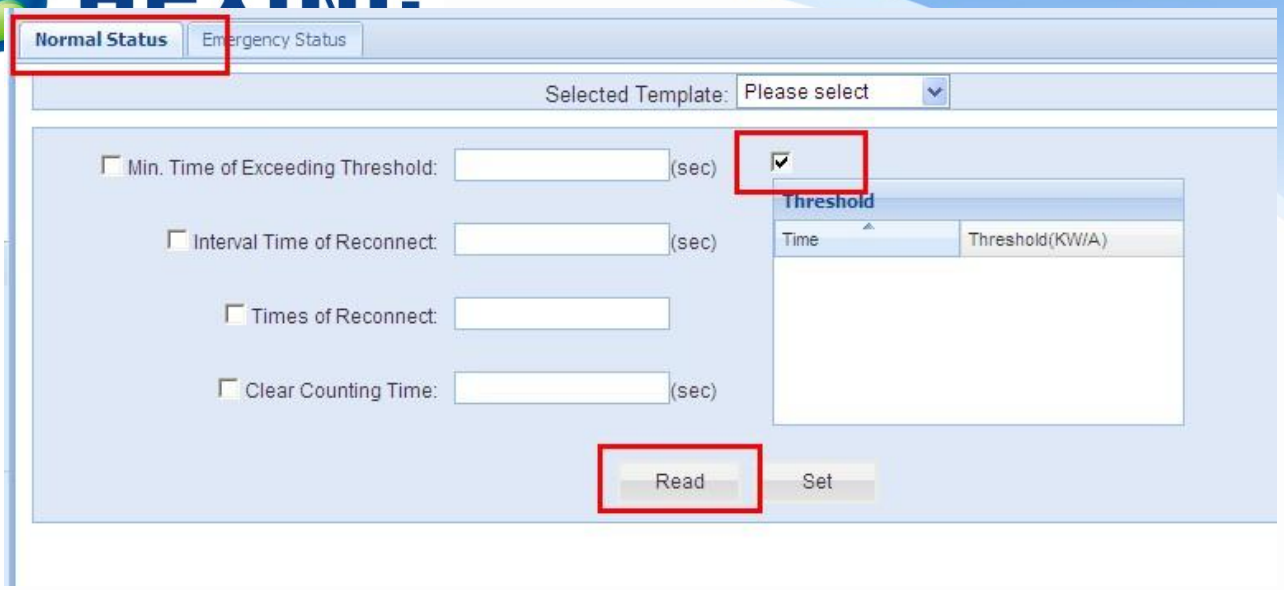


Figure 235 Read Load Template

2)Set: Select the load control template types (Normal Status or Emergency Status), and select the templates that need to set in “Selected Template”. Click “Set” button.

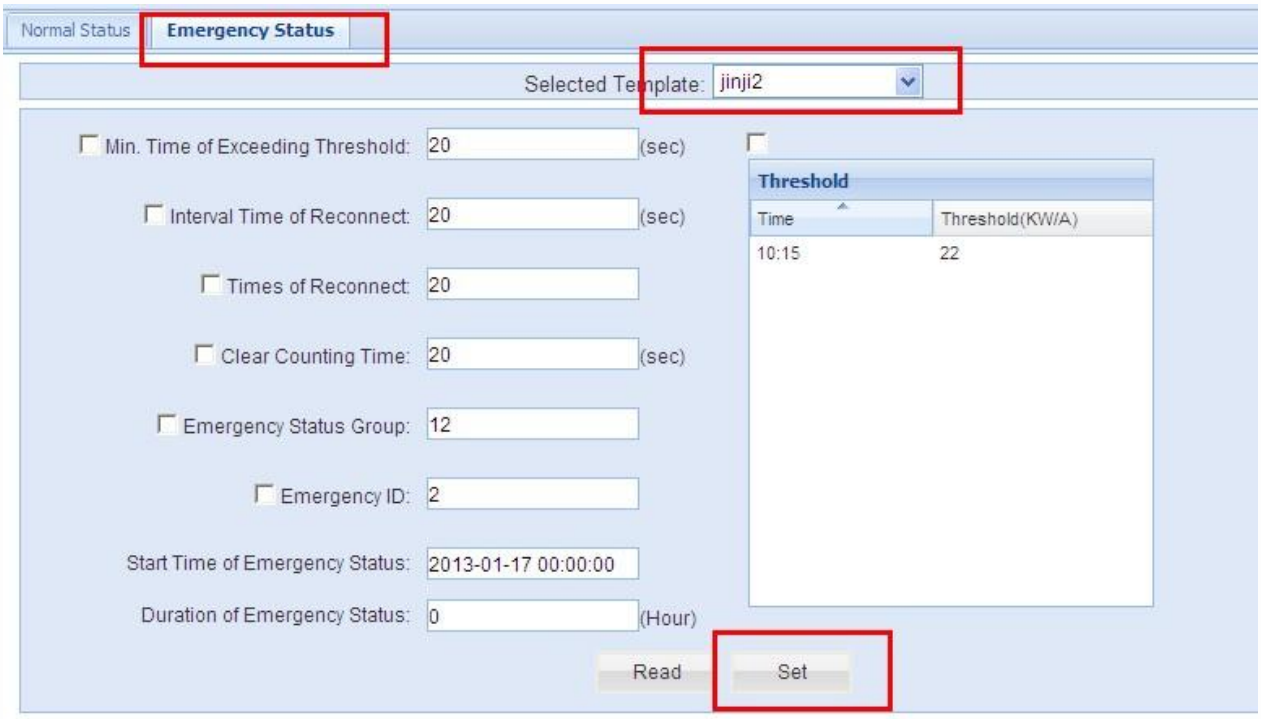


Figure 236 Normal Status Read and Set

12. Terminal Monitoring

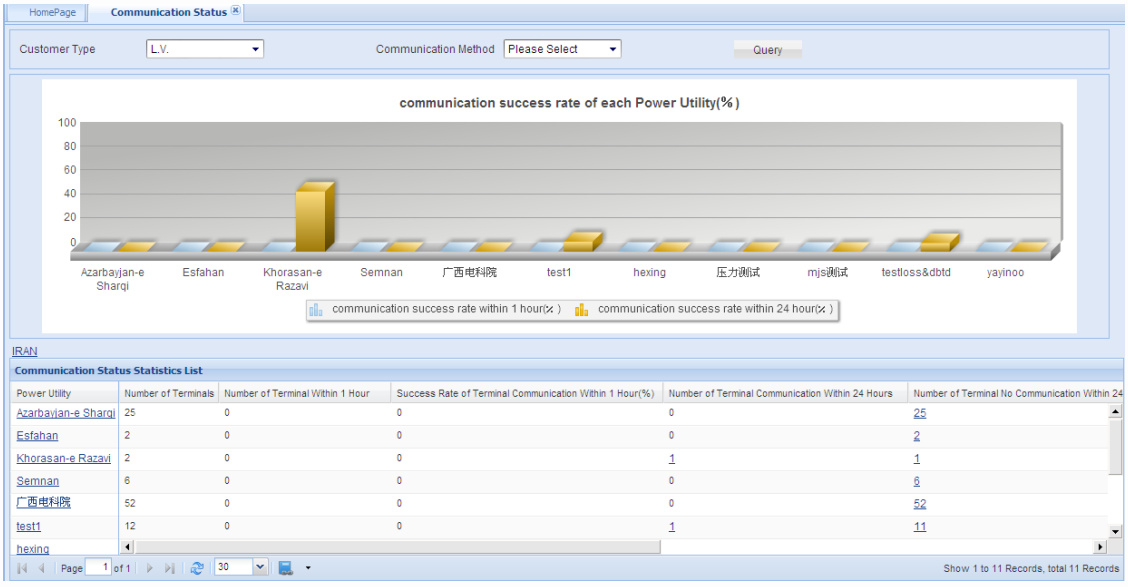
12.1. Communication Status Statistics

[Menu] Diagnostic> Terminals Diagnostic> Communication Statistics

[Function] this is for recording the statistics of the GPRS communication status of terminals. Meanwhile it supports data drill-down so as to realize query of communication data details.

[Step]

Query: Select query conditions: Subscriber and Communication Method, click "Query" button, the query results will be shown in the interface. The bar chart shows the communication success rate during 1 hour and during 24 hours of all the departments. The table shows the communication index condition of all the departments.



Drill-down: click "Power Utility" link and the statistics of subordinate unit will be shown.

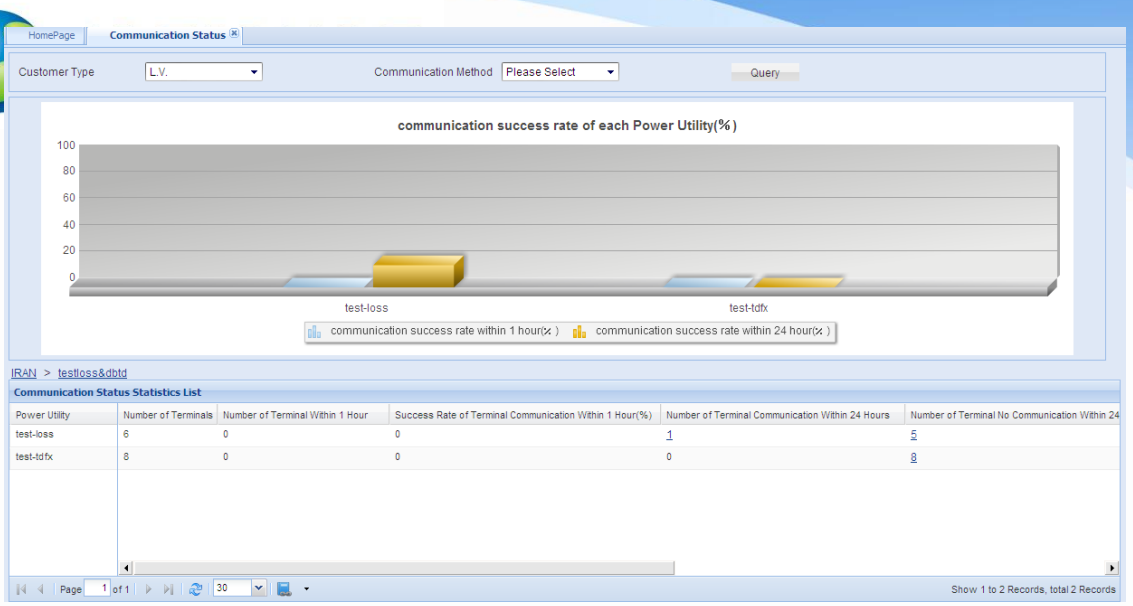


Figure 237 Communication Status Statistics

Communication Status Details: Click the link of "Number of Terminal within 1 hour, Number of Terminal communication within 24 hour, Number of Terminal no communication within 24 hour, Number of Terminal within 24 hour" respectively to enter the interface of communication status details.

12.2. Communication Status Details

[Menu] Diagnostic> Terminals Diagnostic> Communication Detail

[Function] Show the terminal communication details data, fix the terminal position.

[Step]

Query: Select condition: Power Utility, Customer Type, Communication Method, Terminal No. and Communication Time, click "Query" button, the interface show the query results.

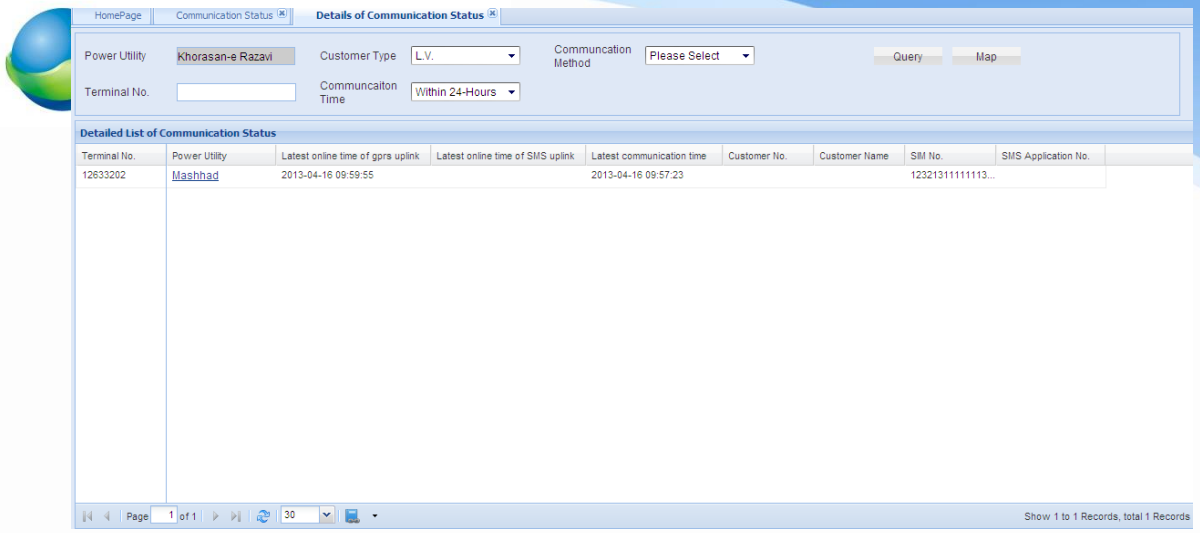


Figure 238 Communication Details

Map: Show geographic position of terminals after query.

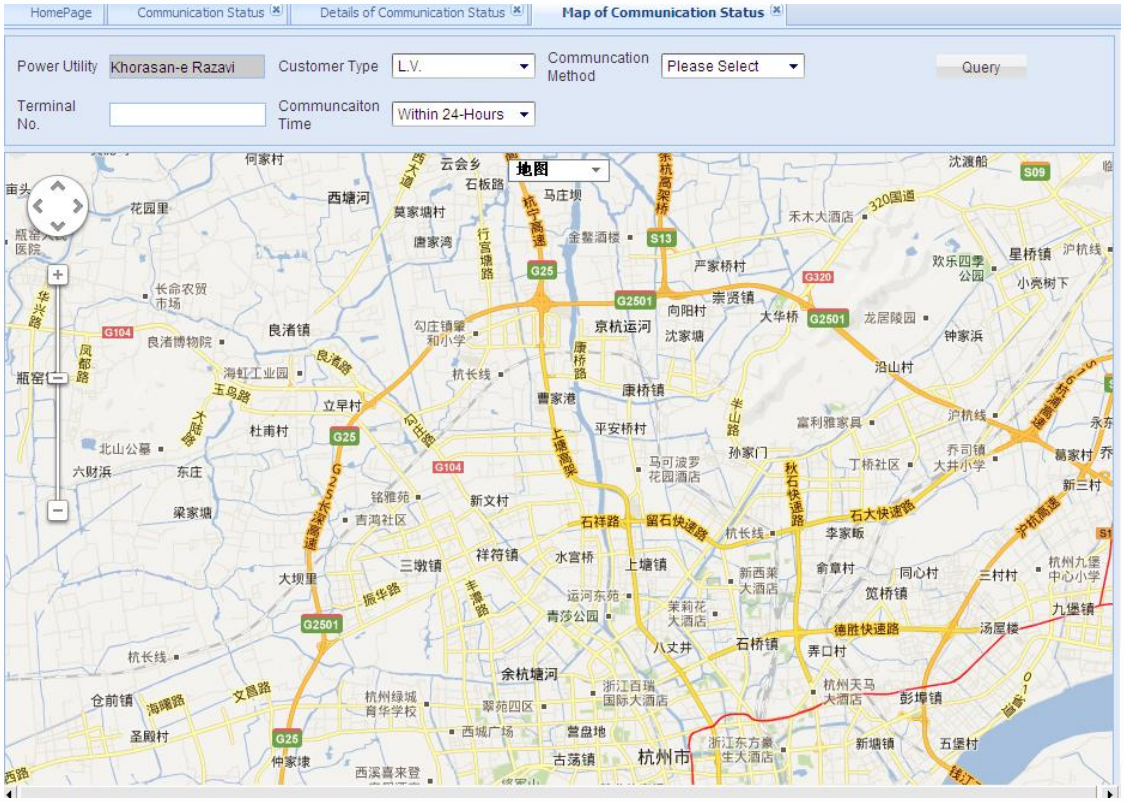


Figure 239 Geographic Information

12.3. Communication Dataflow Statistics

[Menu] Diagnostic> Terminals Diagnostic> Communication Flow Statistics

[Function] this is for recording the statistics for the communication dataflow status of each Utility; meanwhile, it supports the data drill-down so as to realize the query of

meter's communication dataflow details.

[Step]

Query: Select conditions: Customer Type and Month, and click "Query" button.

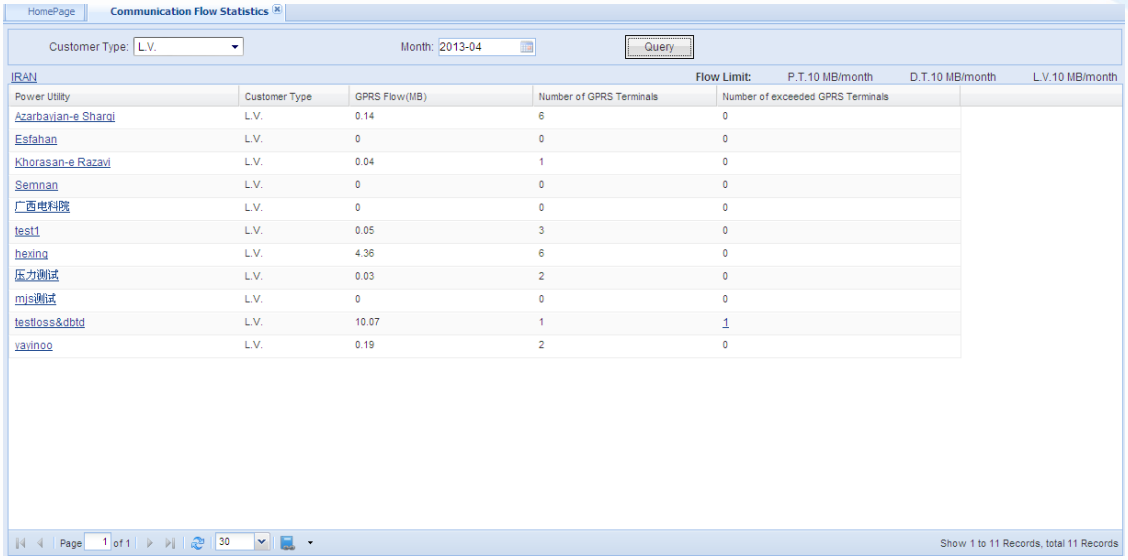

HomePage
Communication Flow Statistics
Customer Type: L.V.
Month: 2013-04
Query
IRAN
Flow Limit: P.T.10 MB/month D.T.10 MB/month L.V.10 MB/month
Power Utility | Customer Type | GPRS Flow(MB) | Number of GPRS Terminals | Number of exceeded GPRS Terminals
Azarbayjan-e Sharqi | L.V. | 0.14 | 6 | 0
Esfahan | L.V. | 0 | 0 | 0
Khorasan-e Razavi | L.V. | 0.04 | 1 | 0
Semnan | L.V. | 0 | 0 | 0
广西电科院 | L.V. | 0 | 0 | 0
test1 | L.V. | 0.05 | 3 | 0
hexing | L.V. | 4.36 | 6 | 0
压力测试 | L.V. | 0.03 | 2 | 0
mjs测试 | L.V. | 0 | 0 | 0
testloss&dbtd | L.V. | 10.07 | 1 | 1
yayinoo | L.V. | 0.19 | 2 | 0
Page 1 of 1
30
Show 1 to 11 Records, total 11 Records

Figure 240 Show Query Result

Drill-down: Click "Power Utility" link, and it will show the statistics of subordinate units.

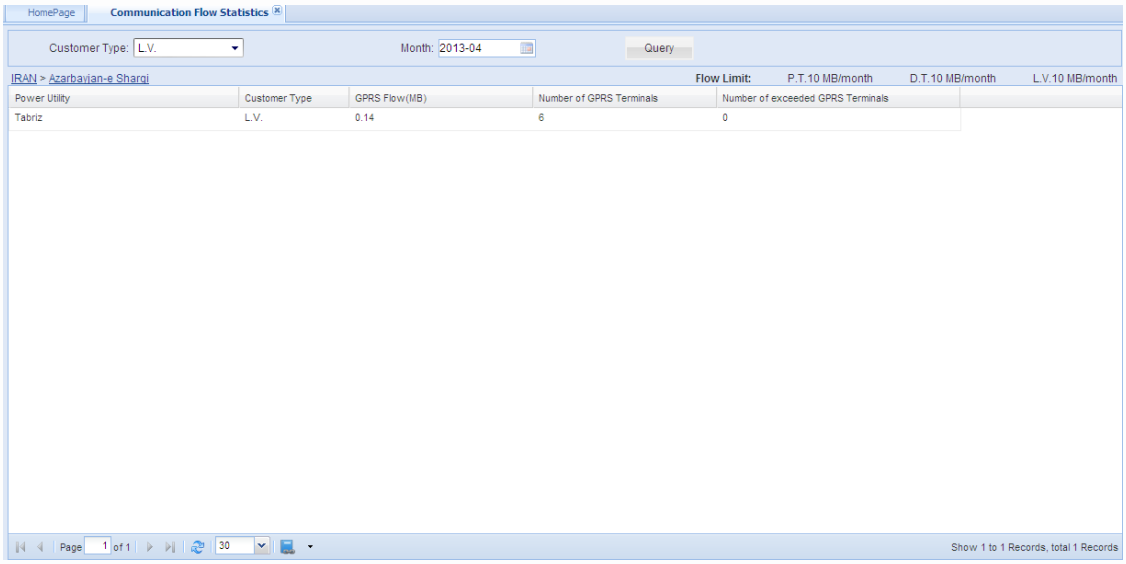

HomePage
Communication Flow Statistics
Customer Type: L.V.
Month: 2013-04
Query
IRAN > Azarbayjan-e Sharqi
Flow Limit: P.T.10 MB/month D.T.10 MB/month L.V.10 MB/month
Power Utility | Customer Type | GPRS Flow(MB) | Number of GPRS Terminals | Number of exceeded GPRS Terminals
Tabriz | L.V. | 0.14 | 6 | 0
Page 1 of 1
30
Show 1 to 1 Records, total 1 Records

Figure 241 Communication Flow Statistics

Communication Dataflow Details: Click the "Number of exceeded Terminals" link to enter the interface of communication dataflow details.

12.4. Communication Dataflow Details

[Menu] Diagnostic> Terminals Diagnostic> Communication Flow Details

[Function] this is for checking the meter's communication dataflow detail.

[Step]

Query: select conditions: Power Utility, Customer Type, Month, Terminal No., Terminal Type, GPRS flow whether exceeded, and click "Query" button.

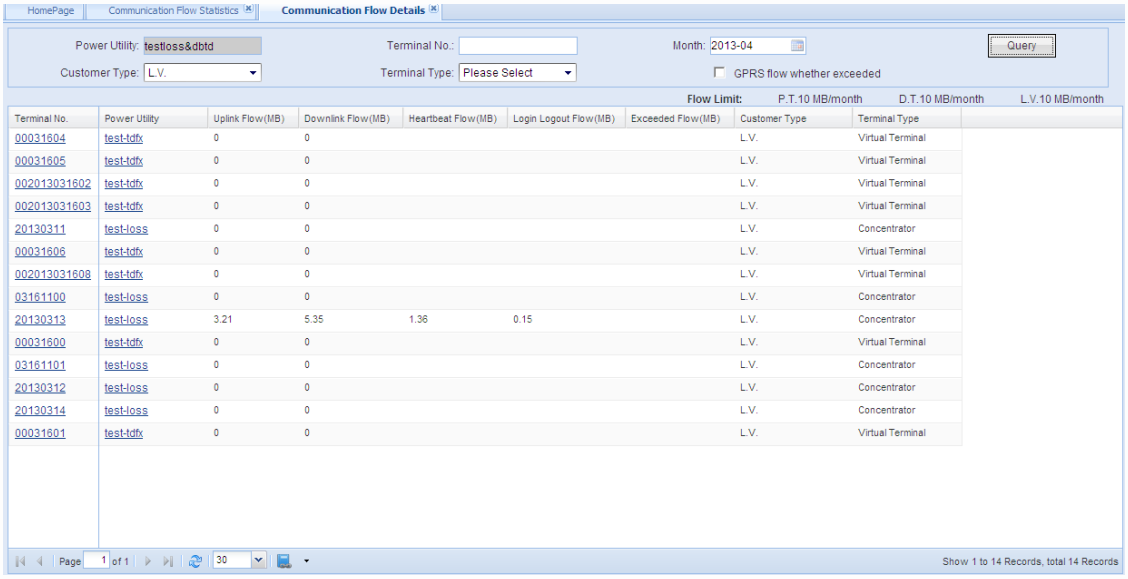

HomePage
Communication Flow Statistics
Communication Flow Details
Power Utility: testloss&dbtd
Terminal No.:
Month: 2013-04
Query
Customer Type: L.V.
Terminal Type: Please Select
GPRS flow whether exceeded
Flow Limit: P.T.10 MB/month D.T.10 MB/month L.V.10 MB/month
Terminal No. | Power Utility | Uplink Flow(MB) | Downlink Flow(MB) | Heartbeat Flow(MB) | Login Logout Flow(MB) | Exceeded Flow(MB) | Customer Type | Terminal Type
00031604 | test-tdfx | 0 | 0 | L.V. | Virtual Terminal
00031605 | test-tdfx | 0 | 0 | L.V. | Virtual Terminal
002013031602 | test-tdfx | 0 | 0 | L.V. | Virtual Terminal
002013031603 | test-tdfx | 0 | 0 | L.V. | Virtual Terminal
20130311 | test-loss | 0 | 0 | L.V. | Concentrator
00031606 | test-tdfx | 0 | 0 | L.V. | Virtual Terminal
002013031608 | test-tdfx | 0 | 0 | L.V. | Virtual Terminal
03161100 | test-loss | 0 | 0 | L.V. | Concentrator
20130313 | test-loss | 3.21 | 5.35 | 1.36 | 0.15 | L.V. | Concentrator
00031600 | test-tdfx | 0 | 0 | L.V. | Virtual Terminal
03161101 | test-loss | 0 | 0 | L.V. | Concentrator
20130312 | test-loss | 0 | 0 | L.V. | Concentrator
20130314 | test-loss | 0 | 0 | L.V. | Concentrator
00031601 | test-tdfx | 0 | 0 | L.V. | Virtual Terminal
Page 1 of 1
30
Show 1 to 14 Records, total 14 Records

Figure 242 Communication Dataflow Details

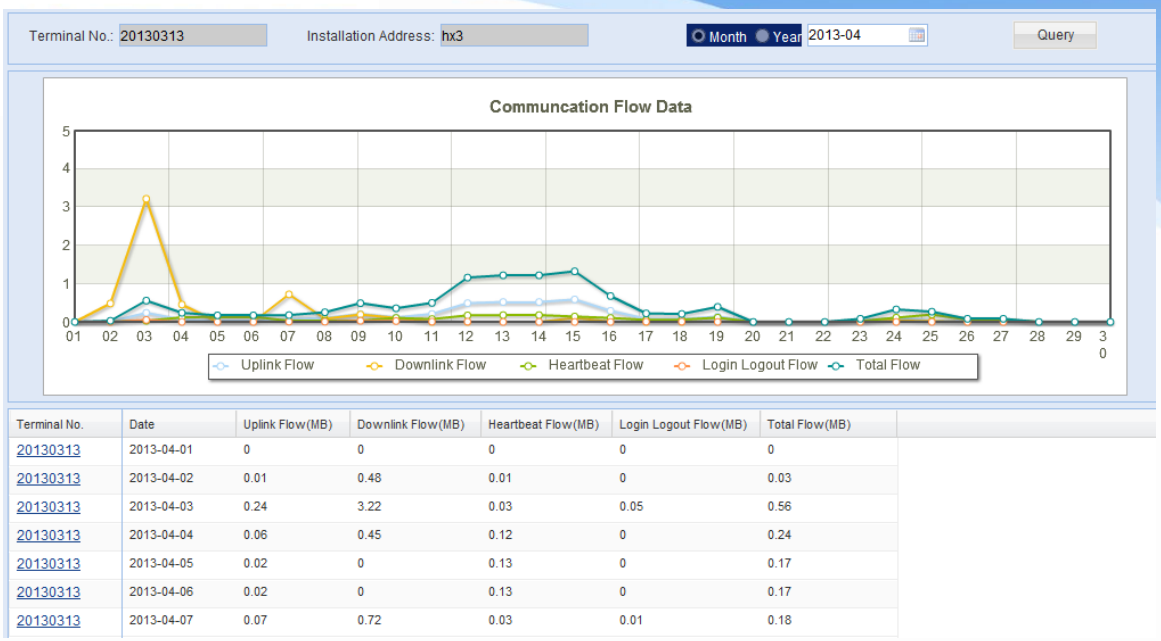
12.5. Communication Dataflow Analysis

[Menu] Diagnostic> Terminals Diagnostic> Communication Flow Analysis

[Function] Query the dataflow using condition of specific terminals and provide the dataflow curve.

[Step]

Query: Select condition: Terminal No., Installation Address, Month/Year, and click " Query" button.



Terminal No.	Date	Uplink Flow(MB)	Downlink Flow(MB)	Heartbeat Flow(MB)	Login Logout Flow(MB)	Total Flow(MB)
20130313	2013-04-01	0	0	0	0	0
20130313	2013-04-02	0.01	0.48	0.01	0	0.03
20130313	2013-04-03	0.24	3.22	0.03	0.05	0.56
20130313	2013-04-04	0.06	0.45	0.12	0	0.24
20130313	2013-04-05	0.02	0	0.13	0	0.17
20130313	2013-04-06	0.02	0	0.13	0	0.17
20130313	2013-04-07	0.07	0.72	0.03	0.01	0.18

Figure 243 Communication Dataflow Analysis

The interface shows the dataflow profile of specific terminal. Here you can check the using condition of each day and of each type of dataflow.

You can also go to Diagnostic> Terminals Diagnostic> Communication Flow Detail menu to query the total dataflow per month. Then click the red square in below figure to enter the Dataflow Analysis interface.

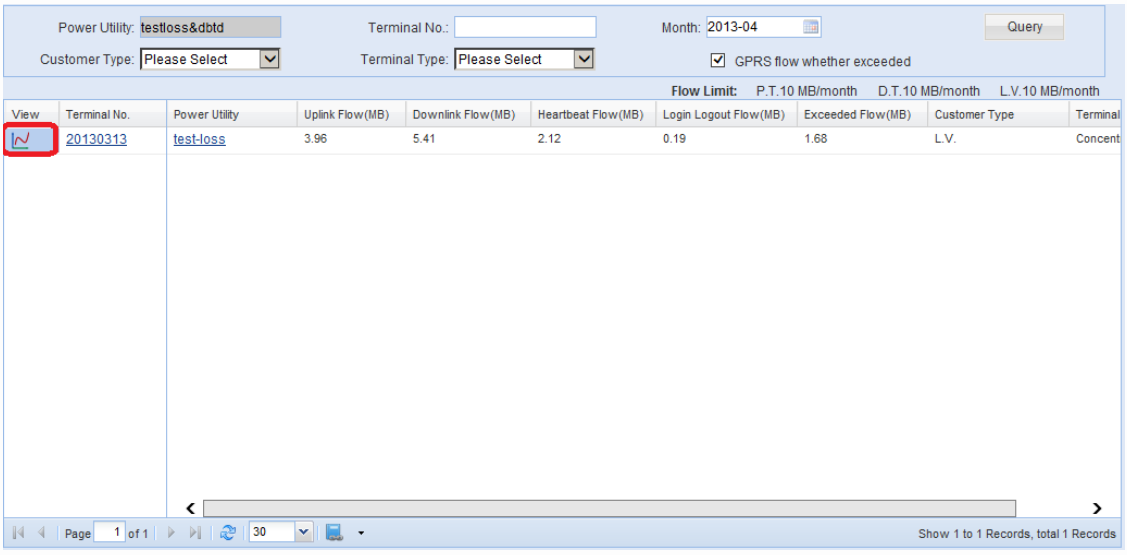


Figure 244 Communication Dataflow Details

12.6. Concentrator Communication Quality Statistics

[Menu] Diagnostic> Terminals Diagnostic> Concentrator Communication Quality

Statistics

[Function] this is for checking, according to day and month, the communication quality of concentrators that belong to different Power Utilities and under which the installed number of meters may differs. This can help analyze when there is how many meters installed under the concentrator, the communication quality will be better.

[Step]

Query: Select condition: Month/Year, and click “Query” button. The query results will be shown in this page.

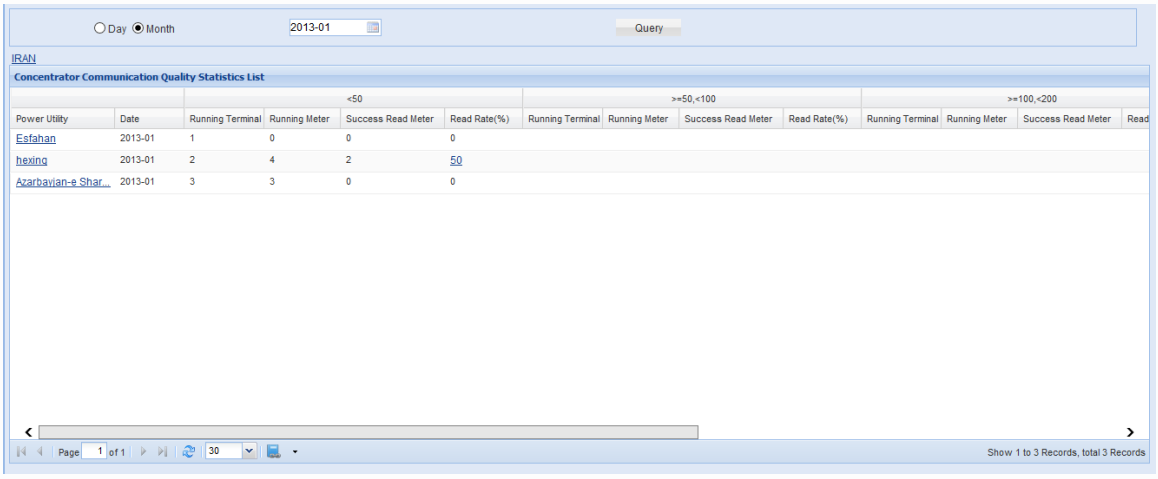


Figure 2415 Concentrator Communication Quality Statistics

The number of installed meters can be set to different levels. This can be set in the system configuration parameters part. For each level, the stastics of number of installed data concentrators, number of installed meters, number of meters that are successfully readout, and meter reading success rate.

12.7. Concentrator Communication Quality Details

[Menu] Diagnostic> Terminals Diagnostic> Concentrator Communication Quality Detail

[Function] this is for checking the communication quality of different levels’ concentrators of a specific Power Utility according to day and month.

[Step]

Query: Select condition: Power Utility, Terminal No., Month/Year, and click

"Query" button. The query results will be shown in this page.

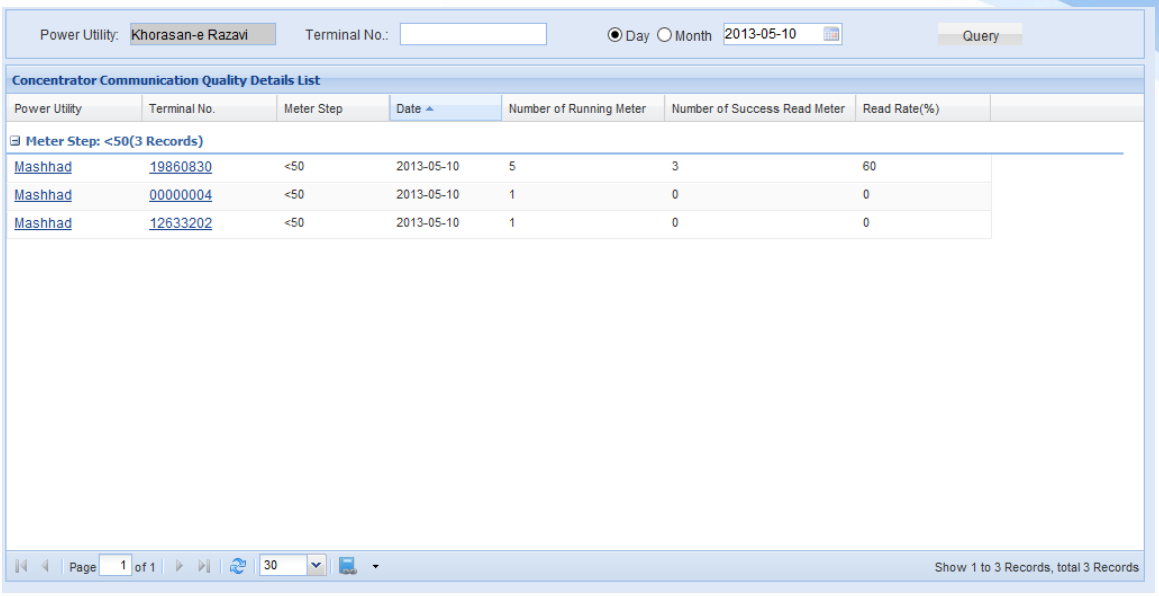


Figure 2426 Concentrator Communication Quality Details

Check the communication condition of various concentrators of a specific Power Utility. It can be seen thur the success rate of meter reading. It contains: number of running meters, number of meters that are successfully read, success rate of meter reading.

13. Line Loss Analysis

13.1. Line Loss Model

[Menu] Advance> Energy Losses Analysis> Energy Losses Model Management

[Function] Complete the construction of line loss statistics model, define the information of meters that are input, output or involved with line loss evaluation in the system.

[Step]

System supports 3 types of line loss calculation: feeder line line loss, transformer area line loss, and transformer branch line line loss. The transformer branch line line loss will be opened or filtered according to the actual need.

13.1.1.Feeder Line Line Loss Model

Select "Line" in the Tab page at left, and click the feeder line that need to configure the line loss mode. Then information of all the meters under this feeder line will be shown in the table at right.

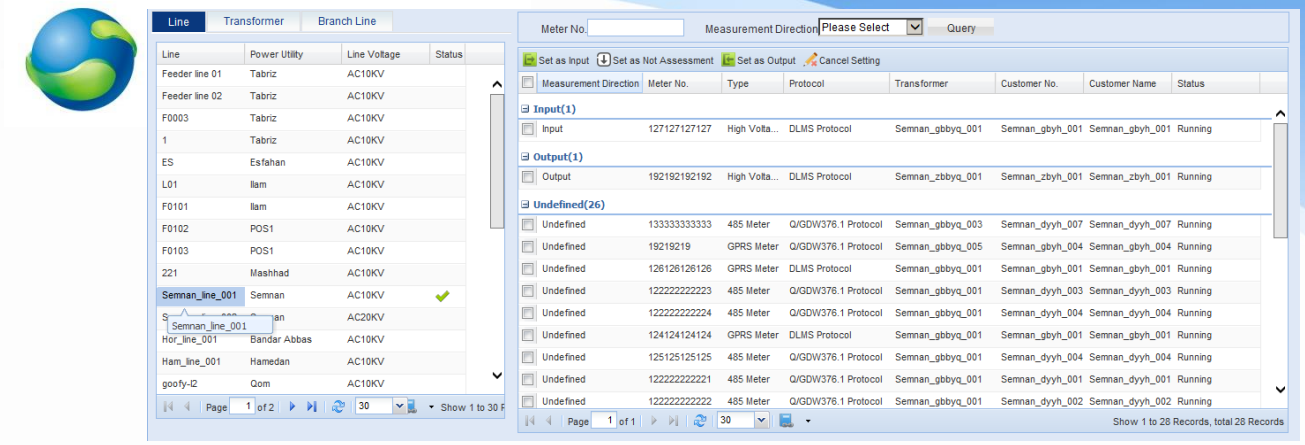


Figure 2437 Feeder Line Line Loss Configuration

1) Set as “Input”: it means the gird meter of the feeder line. many meters can be set here. During the calculation of line loss, the power consumption of all the input meters will be added.
2) Set as “not consider”: these meters will not be included during the line loss calculation.
3) Set as “output”: it means the private transformer or low voltage meter. By default, you don’t need to set it, and it includes all the meters except those “input, output, not consider” meters. But it can also be defined specially.
4) If the lines have been set, the status will show ✔ in the feeder line list at left.

13.1.2. Transformer Area Line Loss Model

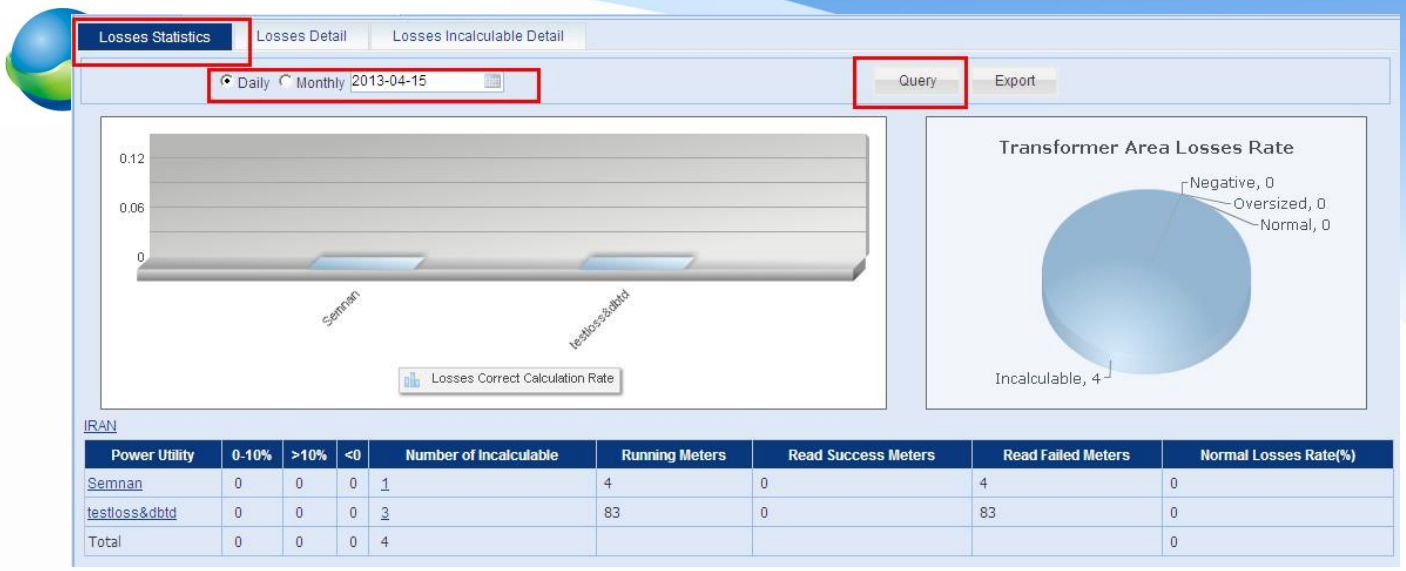
The same as feeder line line loss mode.

13.1.3. Line Loss Model of Transformer Branch line

The same as feeder line line loss mode.

13.2. Transformer Area Line Loss

[Menu]Advance> Utility Line Loss> Transformer Area Losses
[Function] this is for recording the statistics for the line loss of transformer area according to day or month. Meanwhile it also supports data drill-down.
[Step]
1. Line Loss Statistics
   1) Query: Select condition: daily or monthly, choose the date, then click “Query” button, and the query results will be shown in the page. The bar chart shows the correct calculation rate of line loss of each apartment; the pie chart is a summary of transformer area line loss rate of each apartment, which includes below parts: normal, huge, negative and incalculable.

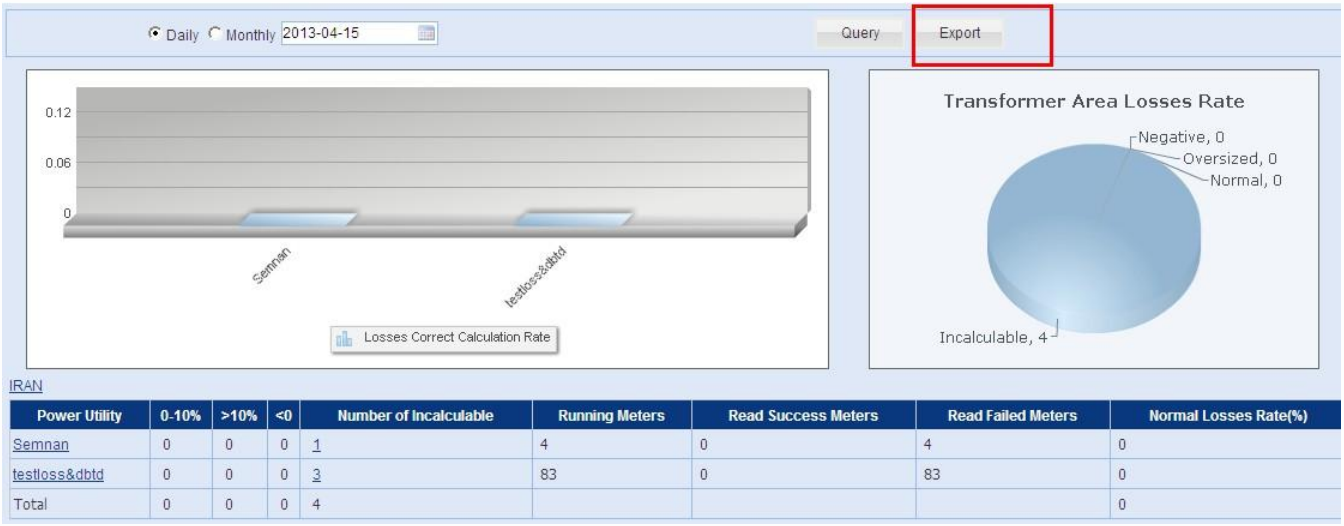


IRAN

Power Utility	0-10%	>10%	<0	Number of Incalculable	Running Meters	Read Success Meters	Read Failed Meters	Normal Losses Rate(%)
Semnan	0	0	0	1	4	0	4	0
testloss&dbtd	0	0	0	3	83	0	83	0
Total	0	0	0	4				0

Figure 2448 Transformer Area Line Loss

2) Output: Click “output” to export the query result to excel file.



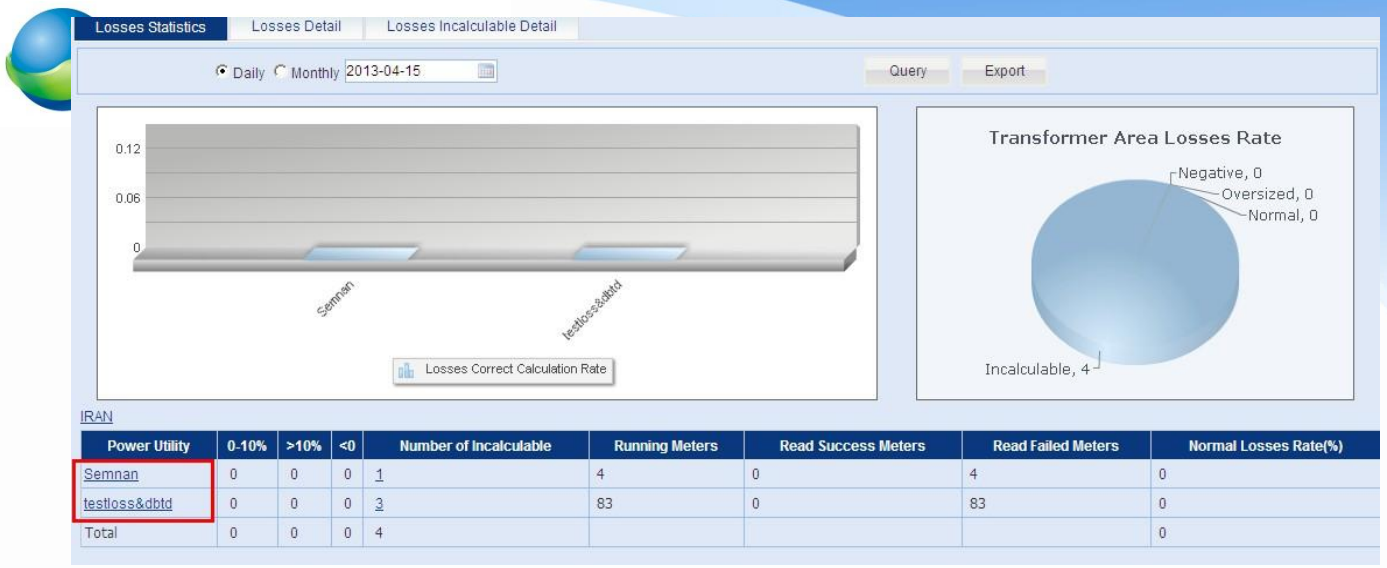
IRAN

Power Utility	0-10%	>10%	<0	Number of Incalculable	Running Meters	Read Success Meters	Read Failed Meters	Normal Losses Rate(%)
Semnan	0	0	0	1	4	0	4	0
testloss&dbtd	0	0	0	3	83	0	83	0
Total	0	0	0	4				0

Figure 2459 Export Transformer Area Line Loss

Figure 24650 Export Excel File

3) Drill-down: Click the link of department in the “Power Utility” list to calculate the transformer area line loss condition of this department.



Power Utility	0-10%	>10%	<0	Number of Incalculable	Running Meters	Read Success Meters	Read Failed Meters	Normal Losses Rate(%)
Semnan	0	0	0	1	4	0	4	0
testloss&dbtd	0	0	0	3	83	0	83	0
Total	0	0	0	4				0

Figure 2471 Drill-down Statistics

4) Show Line loss Details: click the link of number that is larger than 1 in the columns “0-10%”,”>10%”,”<0”; then you can see the relevant line loss details.

IRAN

Power Utility	0-10%	>10%	<0	Number of Incalculable	Running Meters	Read Success Meters	Read Failed Meters	Normal Losses Rate(%)
Semnan	0	1	0	0	6	5	1	0
testloss&dbtd	0	0	0	3	90	0	90	0
Total	0	1	0	3				0

Figure 248 Line Loss Details

5) Show the Incalculable Line Loss Details: click the link of number that is larger than 1 in the column “Number of Incalculable”; then you can see the relevant incalculable line loss details.

Power Utility	0-10%	>10%	<0	Number of Incalculable	Running Meters	Read Success Meters	Read Failed Meters	Normal Losses Rate(%)
Semnan	0	1	0	0	6	5	1	0
testloss&dbtd	0	0	0	3	90	0	90	0
Total	0	1	0	3				0

Figure 2492 Incalculable Line Loss Details

2. Line Loss Details

1) Query: Select condition: Power Utility, daily or monthly, Status, and click “Query” button. The query results will be shown in the page. The line loss details of each transformer area will also be shown.

Figure 250 Query Line Loss Details

2) Power Consumption details: click the link in the "Losses Rates" column and the power consumption details window will pop up.

Figure 251 Pop up Power Consumption Detail

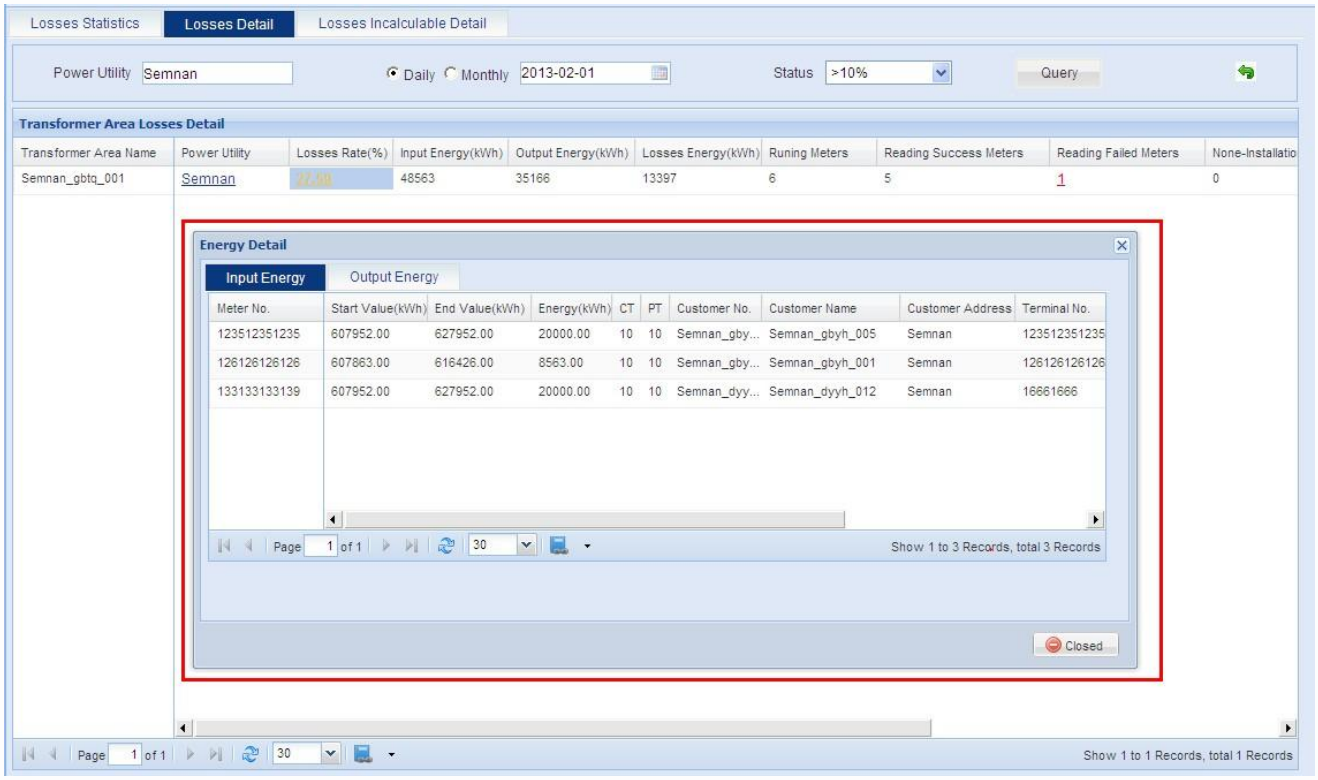


Figure 252 Power Consumption Detail

3) Line loss abnormal analysis: click the link of number in the columns "Reading Failed Meters", "None-Installation Meters", "Trapper Suspect Meters", "No-Communication Within 24 Hours", to open the abnormal line loss analysis window.

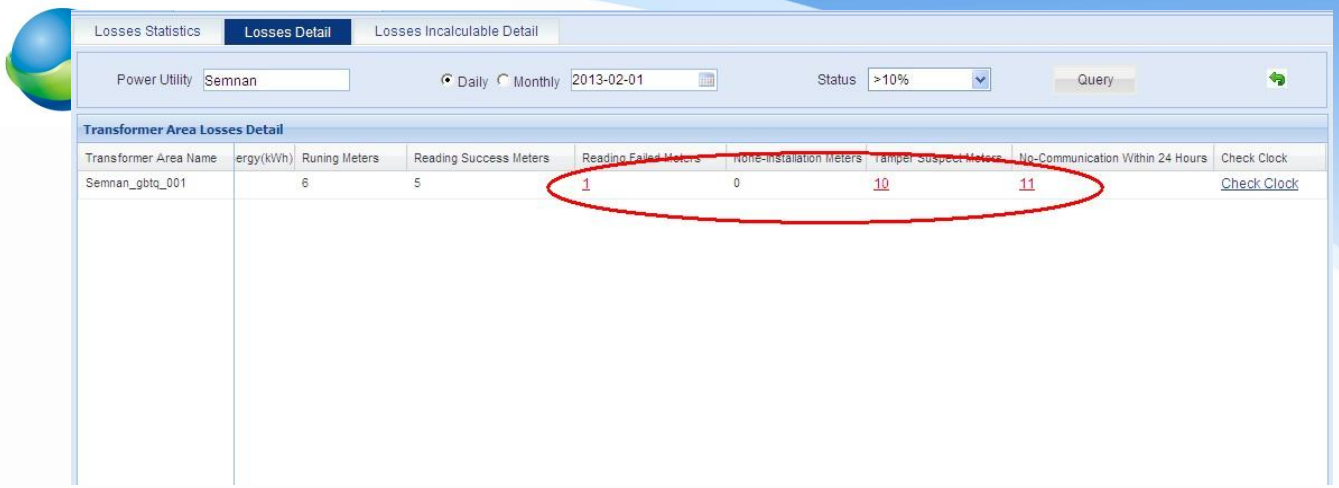


Figure 253 Pop up Abnormal Line Loss Analysis

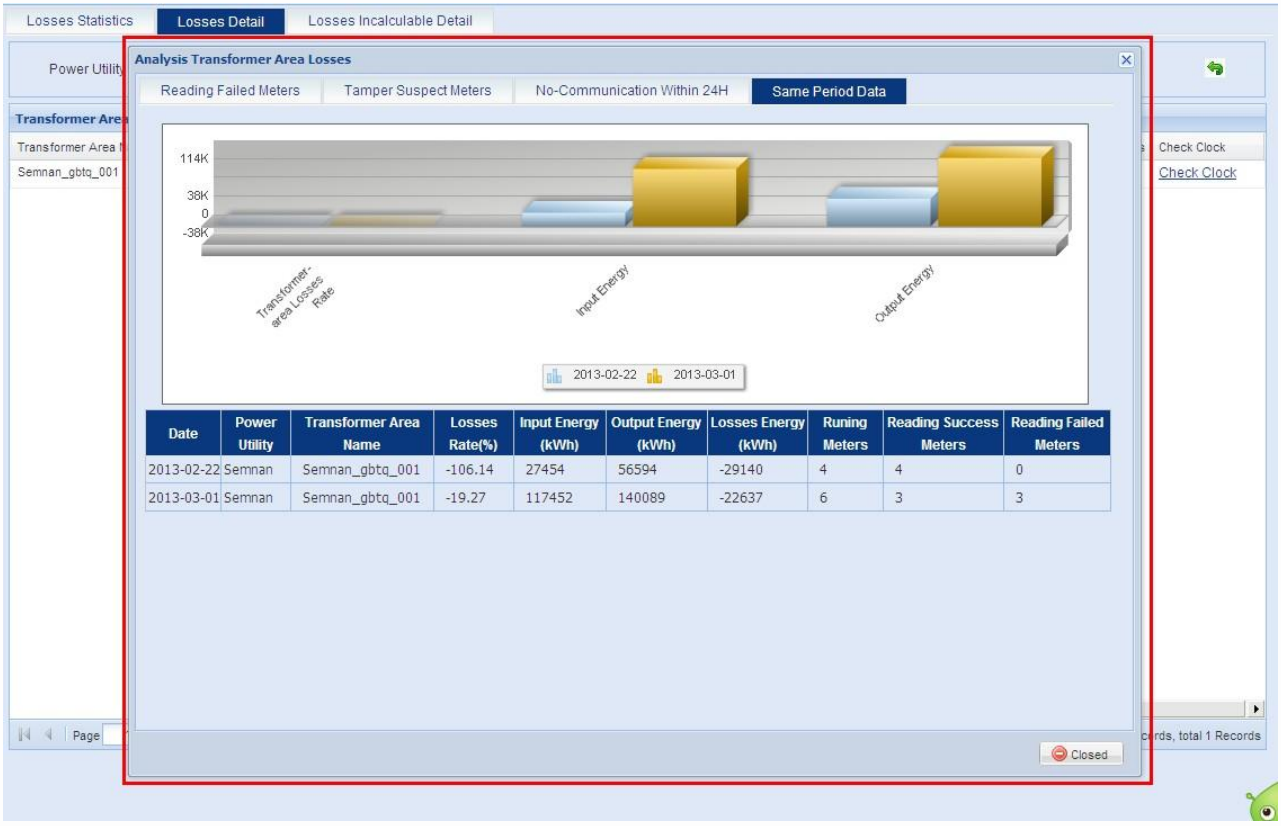


Figure 254 Abnormal Line Loss Analysis

4) Clock detection: click “Check Clock” link to quickly detect the clocks of all the equipments under one of the transformer area, and check the equipment with big clock error.

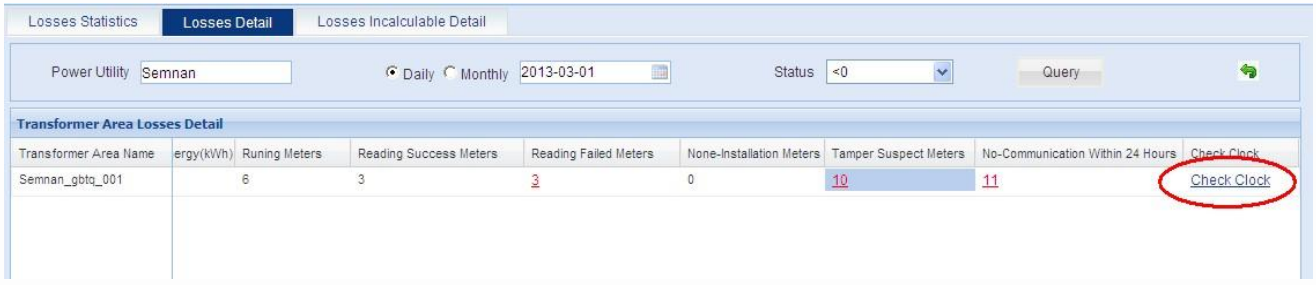


Figure 255 Pop up Clock Detection Window

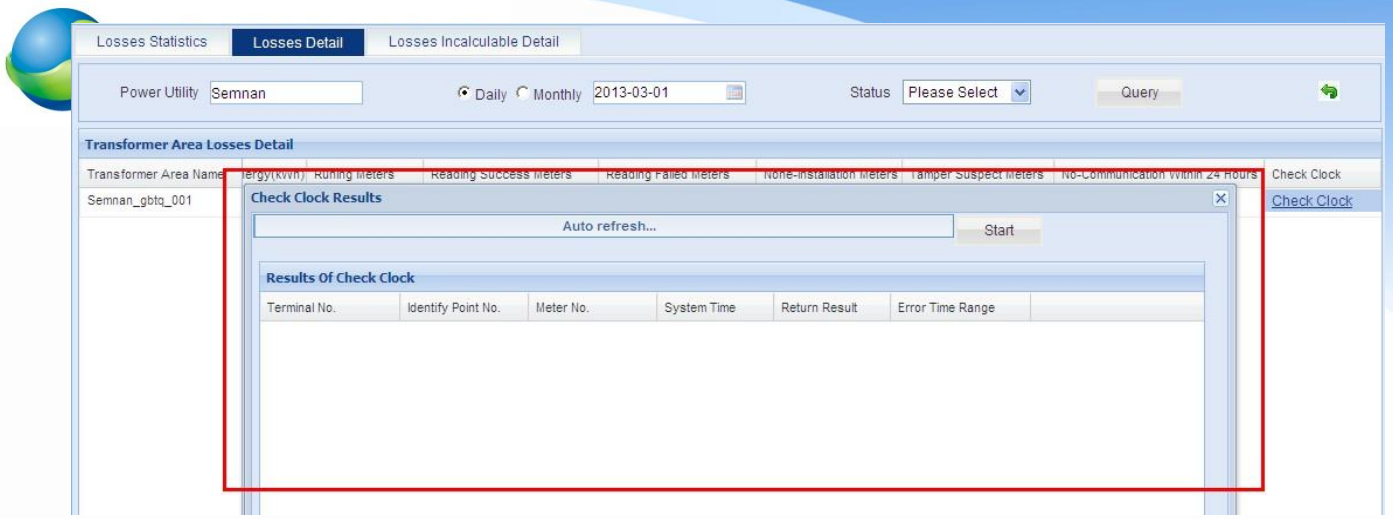


Figure 256 Clock Detecting Window

3. Incalculable Line Loss Details

1) Query: Select condition: Power Utility, daily or monthly, click "Query" button, and the query results will be shown in the page. The incalculable line loss details of transformer area of current Power Utility will also be shown.

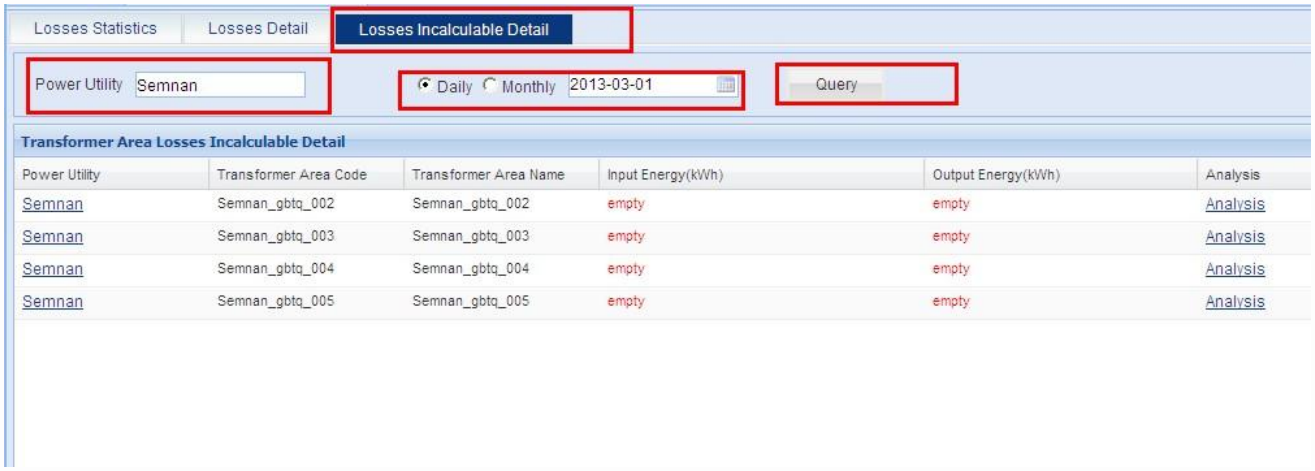


Figure 257 Incalculable Line Loss Details

2) Incalculable line loss analysis: click "Analysis" link and there will be a pop-up window showing the reasons.

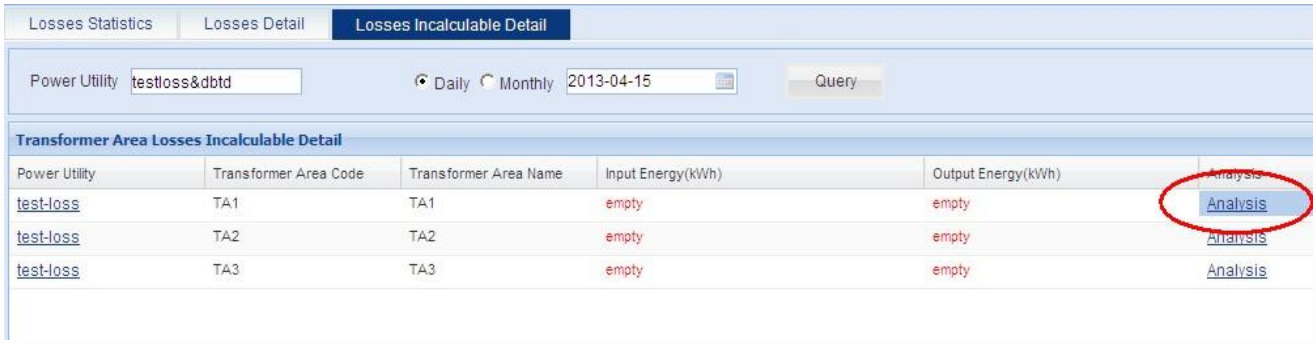


Figure 258 Pop up Abnormal Line Loss Analysis Window

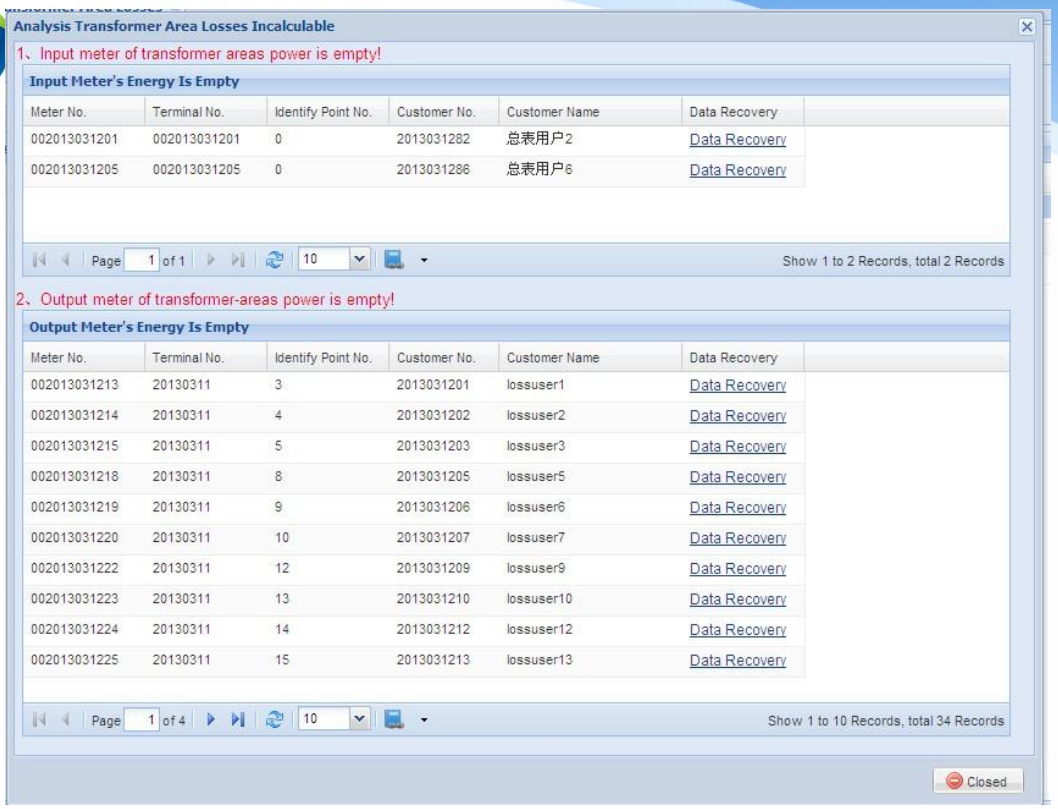

Analysis Transformer Area Losses Incalculable
1、Input meter of transformer areas power is empty!
Input Meter's Energy Is Empty
Meter No. | Terminal No. | Identify Point No. | Customer No. | Customer Name | Data Recovery
002013031201 | 002013031201 | 0 | 2013031282 | 总表用户2 | Data Recovery
002013031205 | 002013031205 | 0 | 2013031286 | 总表用户6 | Data Recovery
Page 1 of 1 10 Show 1 to 2 Records, total 2 Records
2、Output meter of transformer-areas power is empty!
Output Meter's Energy Is Empty
Meter No. | Terminal No. | Identify Point No. | Customer No. | Customer Name | Data Recovery
002013031213 | 20130311 | 3 | 2013031201 | lossuser1 | Data Recovery
002013031214 | 20130311 | 4 | 2013031202 | lossuser2 | Data Recovery
002013031215 | 20130311 | 5 | 2013031203 | lossuser3 | Data Recovery
002013031218 | 20130311 | 8 | 2013031205 | lossuser5 | Data Recovery
002013031219 | 20130311 | 9 | 2013031206 | lossuser6 | Data Recovery
002013031220 | 20130311 | 10 | 2013031207 | lossuser7 | Data Recovery
002013031222 | 20130311 | 12 | 2013031209 | lossuser9 | Data Recovery
002013031223 | 20130311 | 13 | 2013031210 | lossuser10 | Data Recovery
002013031224 | 20130311 | 14 | 2013031212 | lossuser12 | Data Recovery
002013031225 | 20130311 | 15 | 2013031213 | lossuser13 | Data Recovery
Page 1 of 4 10 Show 1 to 10 Records, total 34 Records
Closed

Figure 259 Abnormal Line Loss Analysis Window

3) Restore meter energy consumption data: click "Data Recovery" link to open the window for restoring meter energy consumption data. Select the time point where the energy consumption data is 0, input value (or get the value by clicking Read or Estimation), then click "Save" button and save the input data.

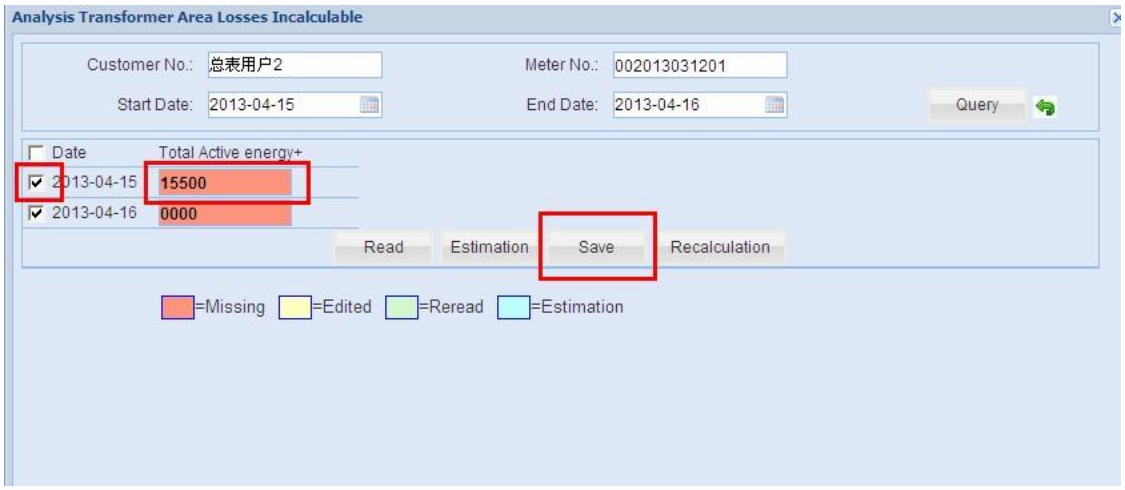


Figure 260 Window for Restoring Abnormal Meter Energy Consumption Data

4) Data recalculation: after the energy consumption data is saved successfully, click "Recalculation" button to recalculate the data.

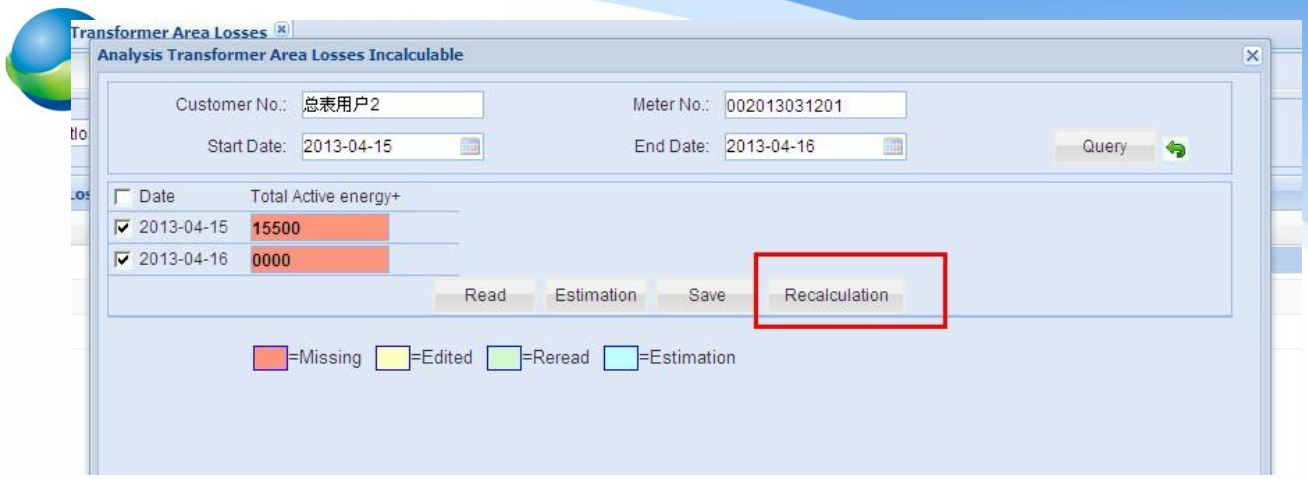


Figure 261 Data Recalculation

13.3. Feeder Line Line Loss

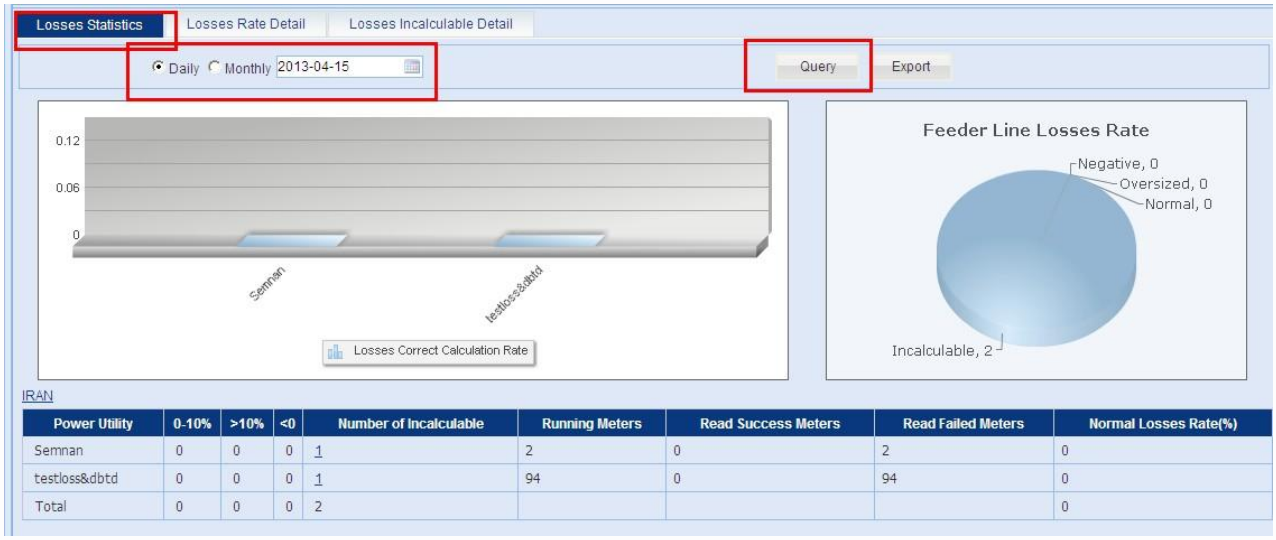
[Menu]Advance> Utility Line Loss> Feeder Line Loss

[Function] this is for recording the statistics for the line loss of feeder line according to day or month. Meanwhile it also supports data drill-down.

[Step]

1. Line Loss Statistics

1) Query: Select condition: daily or monthly, then click "Query" button, and the query results will be shown in the page. The bar chart shows the correct calculation rate of line loss of each department; the pie chart is a summary of feeder line line loss rate of each department, which includes below parts: normal, huge, negative and incalculable.



Power Utility	0-10%	>10%	<0	Number of Incalculable	Running Meters	Read Success Meters	Read Failed Meters	Normal Losses Rate(%)
Semnan	0	0	0	1	2	0	2	0
testloss&dbtd	0	0	0	1	94	0	94	0
Total	0	0	0	2				0

Figure 262 Feeder Line Line Loss

2) Output: Click "output" to export the query result to excel file.

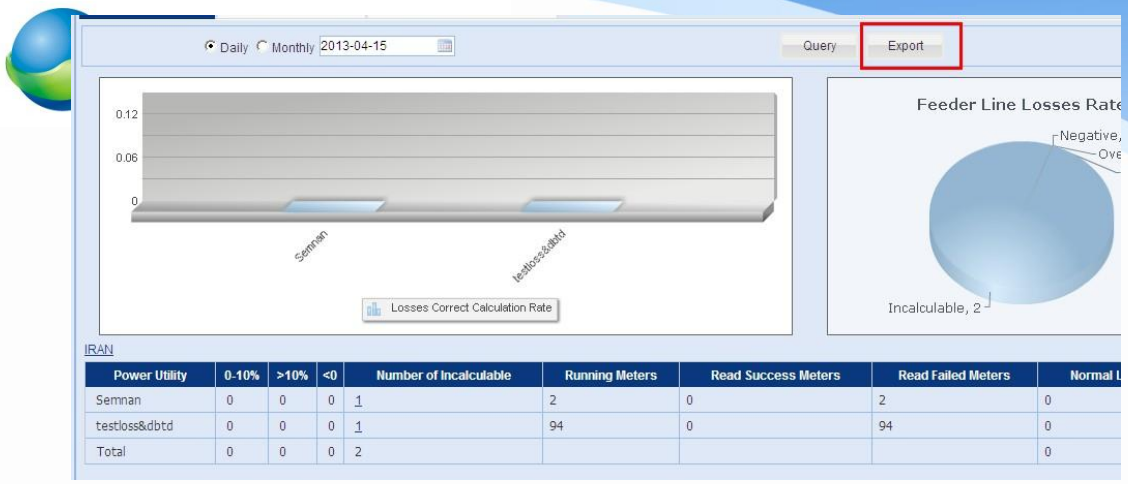


Figure 263 Export the Feeder Line Line Loss

Figure 264 Export Excel File

3) Drill-down: Click the link of department in the "Power Utility" list to calculate the feeder line line loss condition of this department.

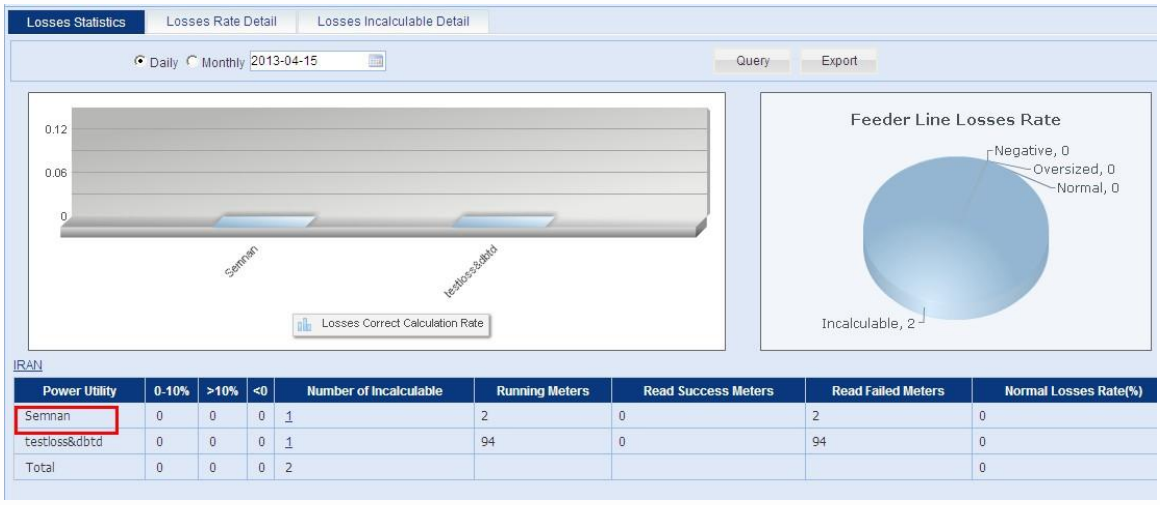


Figure 265 Drill-down Statistics

4) Show Line loss Details: click the link of number that is larger than 1 in the columns "0-10%",">10%","<0"; then you can see the relevant line loss details.

IRAN

Power Utility	0-10%	>10%	<0	Number of Incalculable	Running Meters	Read Success Meters	Read Failed Met
Semnan	0	0	1	0	2	2	0
testloss&dbtd	0	0	0	1	94	0	94
Total	0	0	1	1			

Figure 266 Line Loss Details

5) Show the Incalculable Line Loss Details: click the link of number that is larger than 1 in the column "Number of Incalculable"; then you can see the relevant incalculable line loss details.

IRAN

Power Utility	0-10%	>10%	<0	Number of Incalculable	Running Meters	Read Success Meters	Read Fa
Semnan	0	0	1	0	2	2	0
testloss&dbtd	0	0	0	1	94	0	94
Total	0	0	1	1			

Figure 267 Incalculable Line Loss Details

2. Line Loss Details

1) Query: Select condition: Power Utility, daily or monthly, Status, and click "Query" button. The query results will be shown in the page. The line loss details of each feeder line will also be shown.

Losses Statistics | Losses Rate Detail | Losses Incalculable Detail

Power Utility: Semnan | Daily / Monthly: 2013-04-15 | Status: <0 | Query

Feeder Line Losses Detail

Feeder Line Name	Power Utility	Losses Rate(%)	Input Energy(kWh)	Output Energy (kWh)	Losses Energy (kWh)	Runing Meters	Reading Success Meters	Reading Failed Meter
Semnan_line_001	Semnan	-50	100	150	-50	2	2	0

Figure 268 Query Line Loss Details

2) Power Consumption details: click the link in the "Losses Rates" column and the power consumption details window will pop up.

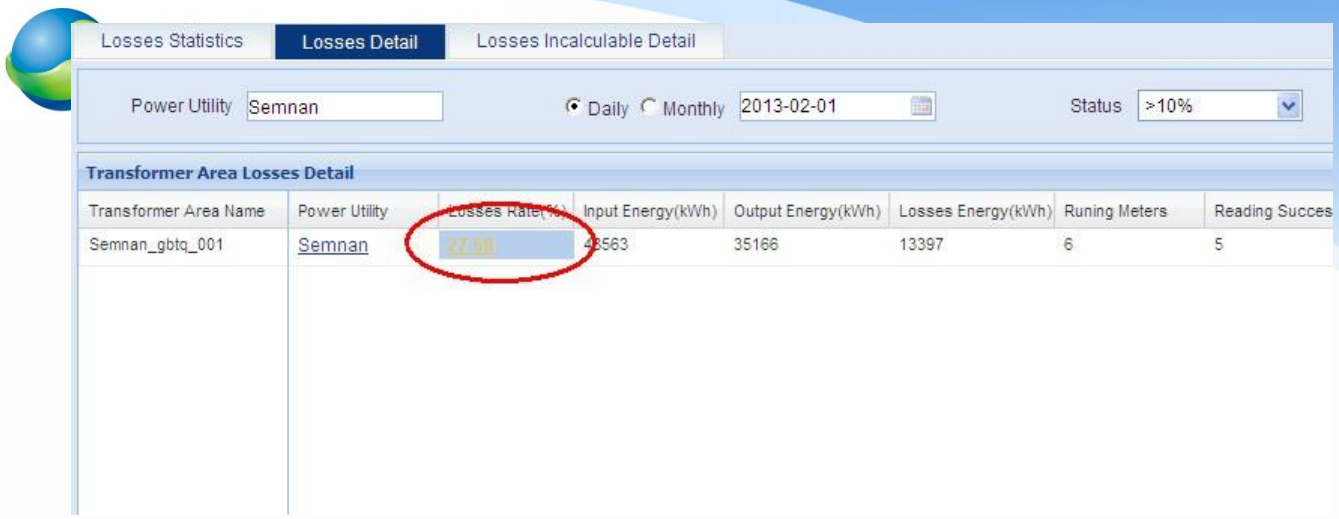


Figure 269 Pop up Energy Consumption Data Details

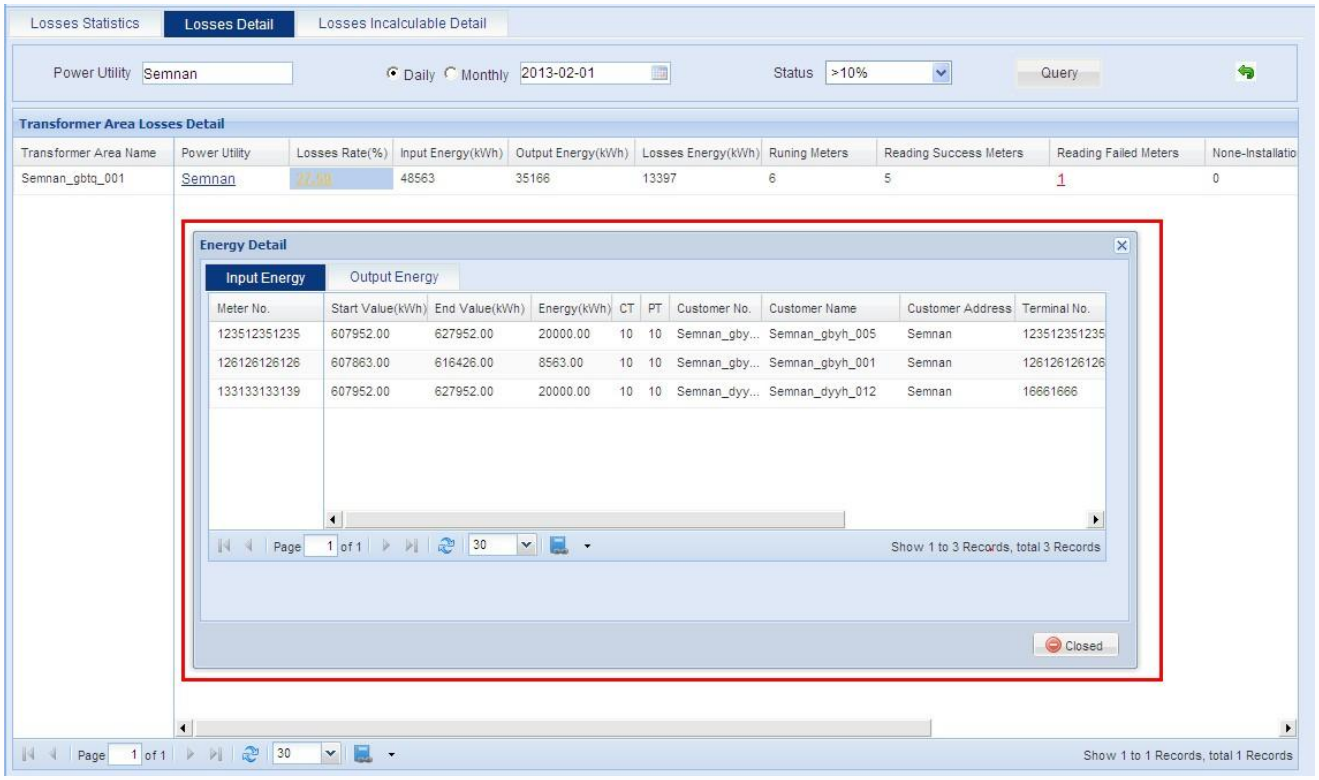


Figure 270 Energy Consumption Data Details

3) Line loss abnormal analysis: click the link of number in the columns “Reading Failed Meters”, “None-Installation Meters”, “Trapper Suspect Meters”, “No-Communication Within 24 Hours”, to open the abnormal line loss analysis window.

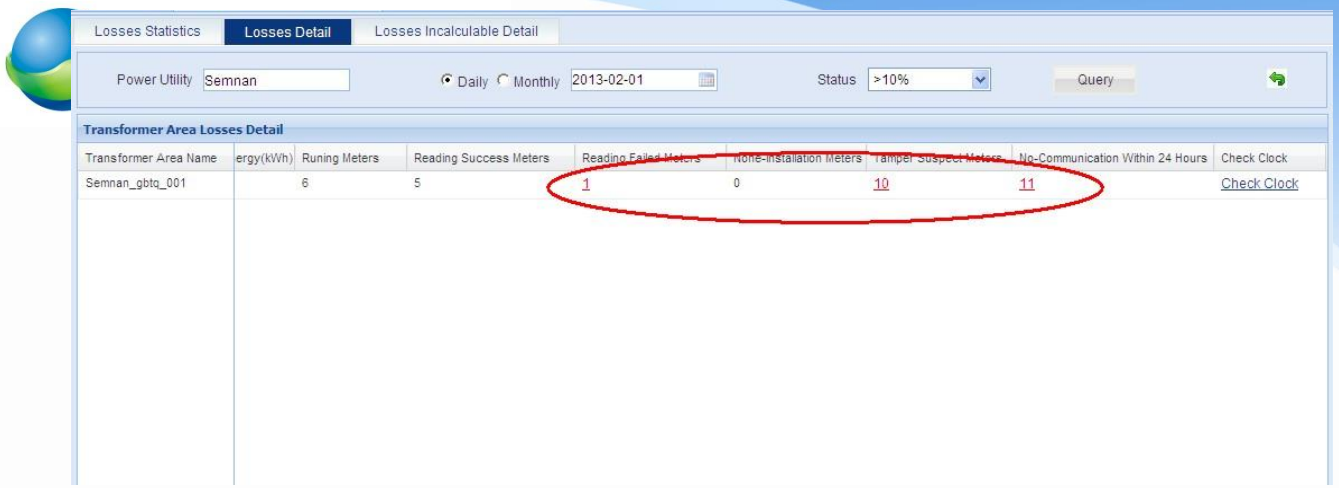


Figure 271 Pop up Abnormal Line Loss Analysis

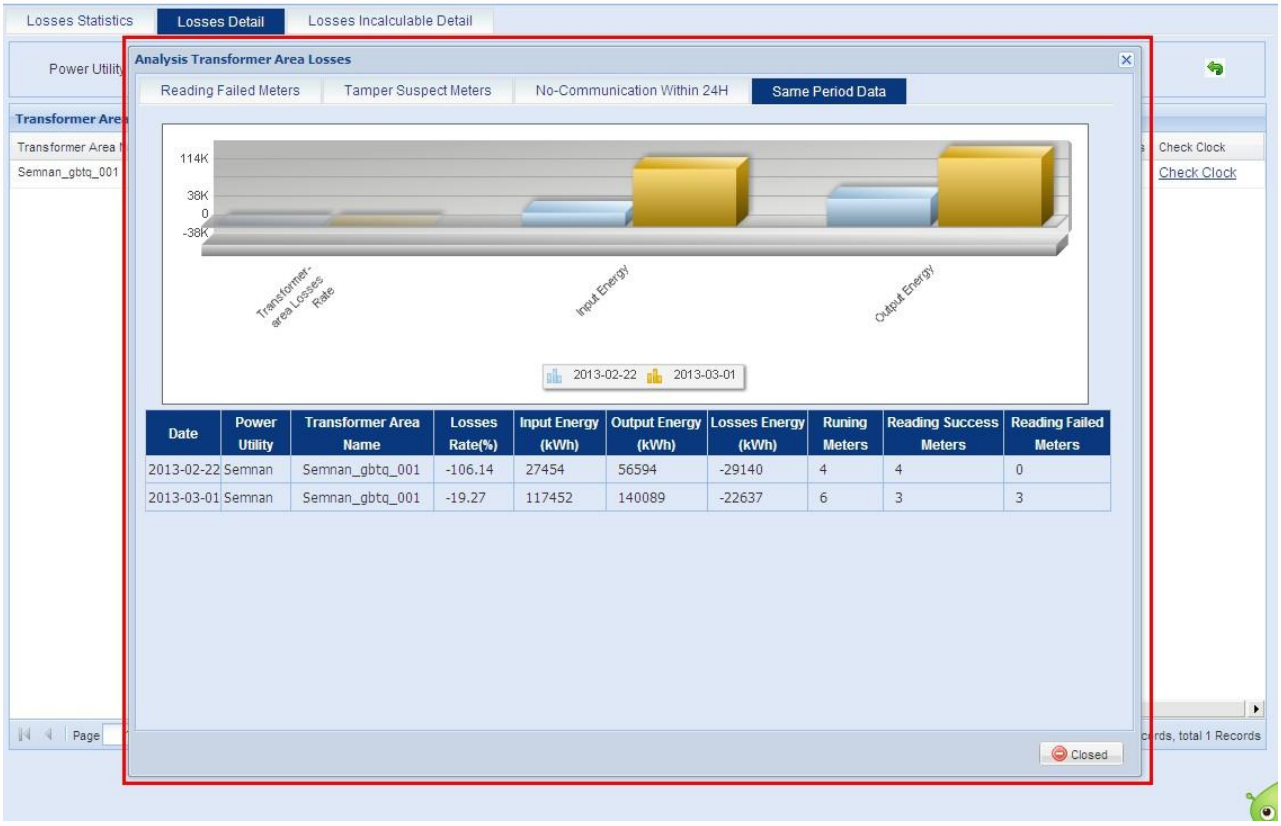


Figure 272 Abnormal Line Loss Analysis

3. Incalculable Line Loss Details

1) Query: Select condition: Power Utility, daily or monthly, click “Query” button, and the query results will be shown in the page. The incalculable line loss details of feeder line of current Power Utility will also be shown.

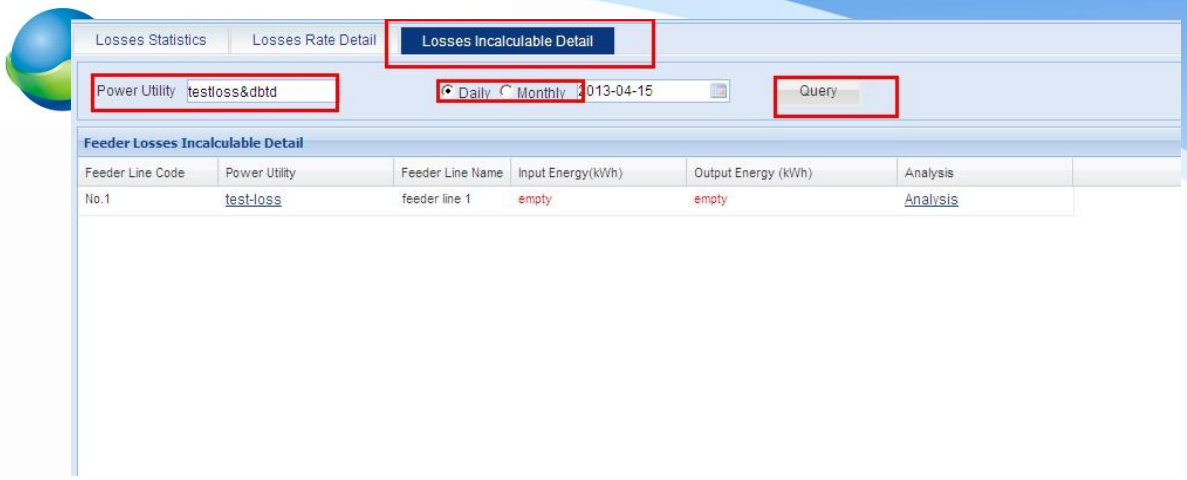


Figure 273 Incalculable Line Loss Details

2) Incalculable line loss analysis: click "Analysis" link and there will be a pop-up window showing the reasons.

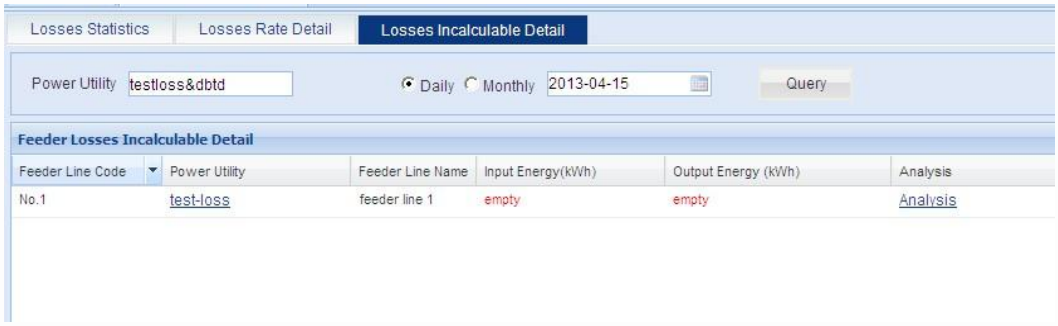


Figure 274 Incalculable Line Loss Analysis

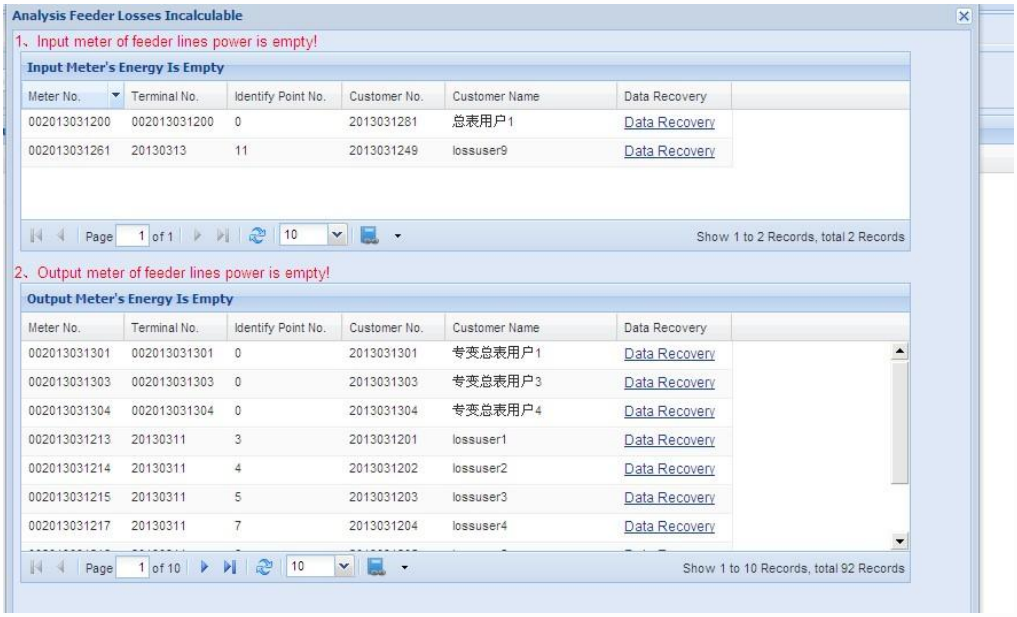

Analysis Feeder Losses Incalculable
1、Input meter of feeder lines power is empty!
Input Meter's Energy Is Empty
Meter No.
Terminal No.
Identify Point No.
Customer No.
Customer Name
Data Recovery
002013031200 002013031200 0 2013031281 总表用户1 Data Recovery
002013031261 20130313 11 2013031249 lossuser9 Data Recovery
Page 1 of 1
Show 1 to 2 Records, total 2 Records
2、Output meter of feeder lines power is empty!
Output Meter's Energy Is Empty
002013031301 002013031301 0 2013031301 专变总表用户1 Data Recovery
002013031303 002013031303 0 2013031303 专变总表用户3 Data Recovery
002013031304 002013031304 0 2013031304 专变总表用户4 Data Recovery
002013031213 20130311 3 2013031201 lossuser1 Data Recovery
002013031214 20130311 4 2013031202 lossuser2 Data Recovery
002013031215 20130311 5 2013031203 lossuser3 Data Recovery
002013031217 20130311 7 2013031204 lossuser4 Data Recovery
Page 1 of 10
Show 1 to 10 Records, total 92 Records

Figure 275 Incalculable Feeder Line Details

3) Restore meter energy consumption data: click "Data Recovery" link to open the window for restoring meter energy consumption data. Select the time point where the energy consumption data is 0, input value (or get the value by clicking Read or Estimation), then click "Save" button and save the input data.

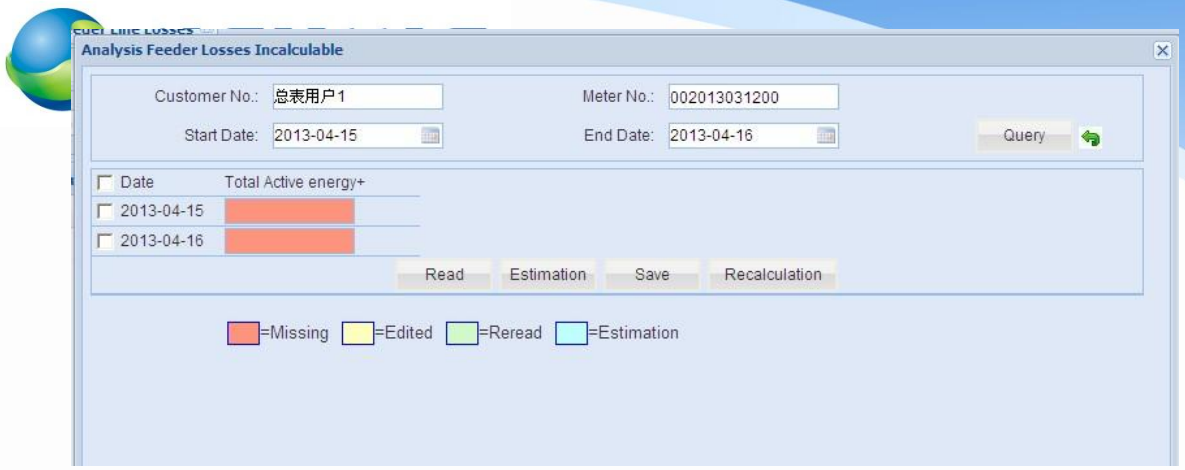


Figure 276 Data Code

4) Data recalculation: after the energy consumption data is saved successfully, click "Recalculation" button to recalculate the data.

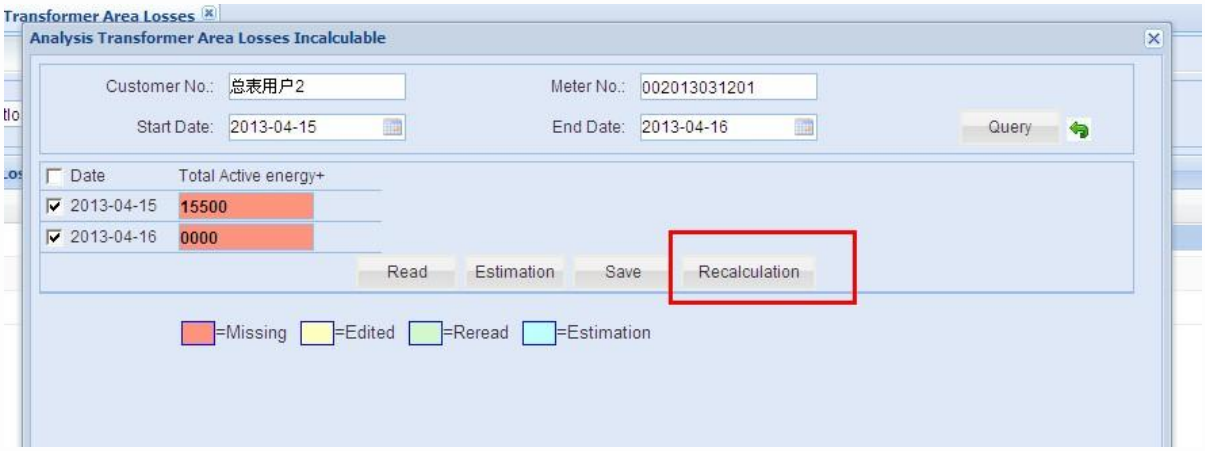


Figure 277 Data Recalculation

13.4. Line Loss for Transformer Branch Line

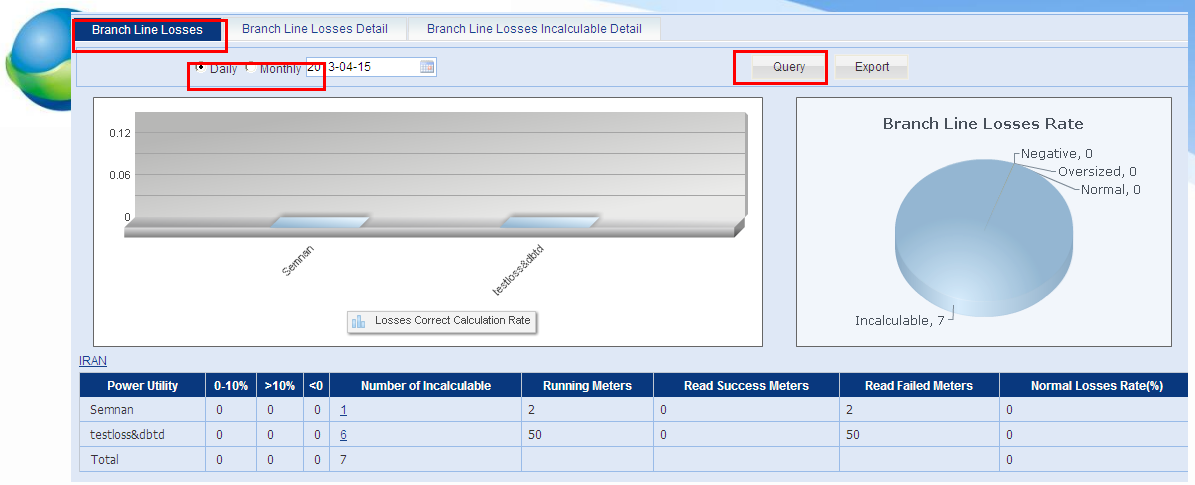
[Menu]Advance> Utility Line Loss> Branch Line Losses

[Function] this is for recording the statistics for the line loss of transformer branch line according to day or month. Meanwhile it also supports data drill-down.

[Step]

1. Line Loss Statistics

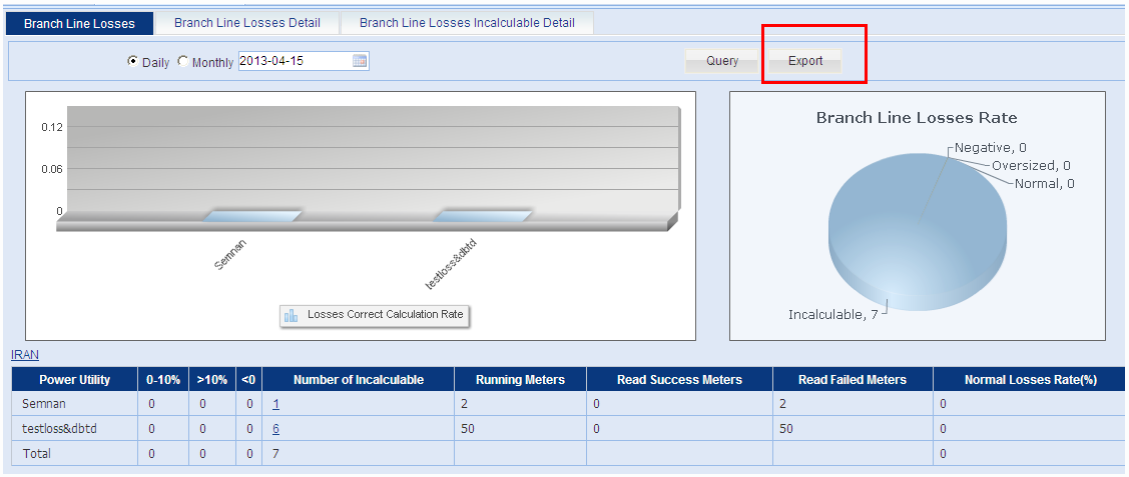
1) Query: Select condition: daily or monthly, then click "Query" button, and the query results will be shown in the page. The bar chart shows the correct calculation rate of line loss of each department; the pie chart is a summary of transformer branch line line loss rate of each department, which includes below parts: normal, huge, negative and incalculable.



Power Utility	0-10%	>10%	<0	Number of Incalculable	Running Meters	Read Success Meters	Read Failed Meters	Normal Losses Rate(%)
Semnan	0	0	0	1	2	0	2	0
testloss&dbtd	0	0	0	6	50	0	50	0
Total	0	0	0	7				0

Figure 278 Transformer Branch Line Line Loss

2) Output: Click “output” to export the query result to excel file.



Power Utility	0-10%	>10%	<0	Number of Incalculable	Running Meters	Read Success Meters	Read Failed Meters	Normal Losses Rate(%)
Semnan	0	0	0	1	2	0	2	0
testloss&dbtd	0	0	0	6	50	0	50	0
Total	0	0	0	7				0

Figure 279 Export the Transformer Branch Line Line Loss

Figure 280 Export to Excel File

3) Drill-down: Click the link of department in the “Power Utility” list to calculate the feeder line line loss condition of this department.

IRAN

Power Utility	0-10%	>10%	<0	Number of Incalculable	Running Meters	Read Success Meters	Read Failed Meters
Semnan	0	0	0	1	2	0	2
testloss&dbtd	0	0	0	6	50	0	50
Total	0	0	0	7			

Figure 281 Drill-down Statistics

4) Show Line loss Details: click the link of number that is larger than 1 in the columns "0-10%",">10%","<0"; then you can see the relevant line loss details.

IRAN

Power Utility	0-10%	>10%	<0	Number of Incalculable	Running Meters	Read Success Meters	Read Failed
Semnan	0	0	0	1	2	0	2
testloss&dbtd	0	5	1	1	57	50	7
Total	0	5	1	2			

Figure 282 Line Loss Details

5) Show the Incalculable Line Loss Details: click the link of number that is larger than 1 in the column "Number of Incalculable"; then you can see the relevant incalculable line loss details.

IRAN

Power Utility	0-10%	>10%	<0	Number of Incalculable	Running Meters	Read Success Meters	Read Fa
Semnan	0	0	0	1	2	0	2
testloss&dbtd	0	0	0	6	50	0	50
Total	0	0	0	7			

Figure 283 Incalculable Line Loss Details

2. Line Loss Details

1) Query: Select condition: Power Utility, daily or monthly, Status, and click "Query" button. The query results will be shown in the page. The line loss details of each transformer branch line will also be shown.

Branch Line Losses | Branch Line Losses Detail | Branch Line Losses Incalculable Detail

Power Utility testloss&dbtd | Daily Monthly 2013-03-25 | Status >10% | Query

Branch Line Losses Detail

Line Name	Power Utility	Transformer	Losses Rate(%)	Input Energy(kWh)	Output Energy (kWh)	Losses Energy (kWh)	Runing Meters	Reading Success Meters	Reading Failed
TR5-2	test-loss	TR5	37.74	530	330	200	6	5	1
TR1-2	test-loss	TR1	36.43	1101.12	700	401.12	10	9	1
TR1-1	test-loss	TR1	20.07	1000.88	800	200.88	9	9	0
TR6-2	test-loss	TR6	52.32	592.4	282.43	309.97	5	4	1
TR6-1	test-loss	TR6	31.17	770	530	240	5	4	1

Figure 284 Query Line Loss Details

2) Power Consumption details: click the link in the "Losses Rates" column and the power consumption details window will pop up.

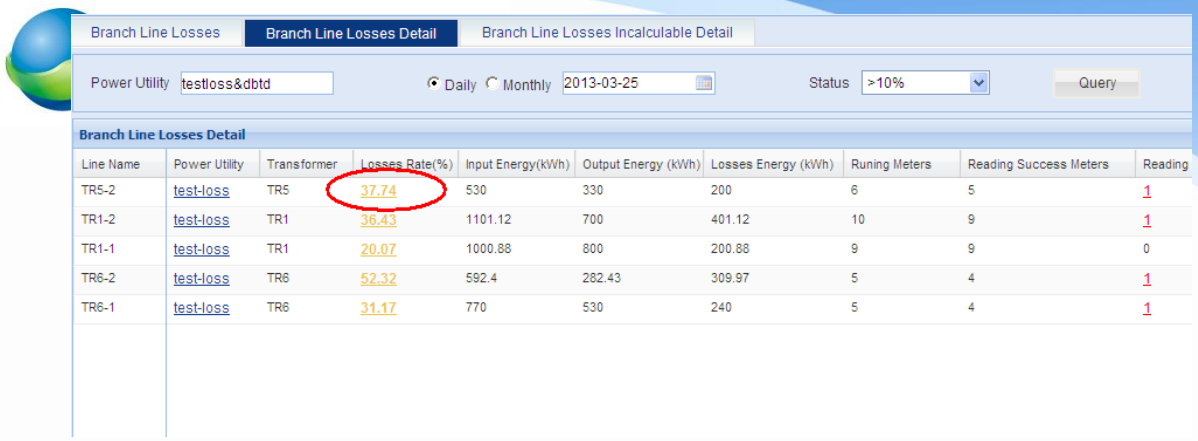

Branch Line Losses
Branch Line Losses Detail
Branch Line Losses Incalculable Detail
Power Utility testloss&dbtd
Daily Monthly 2013-03-25
Status >10%
Query
Branch Line Losses Detail
Line Name Power Utility Transformer Losses Rate(%) Input Energy(kWh) Output Energy (kWh) Losses Energy (kWh) Runing Meters Reading Success Meters Reading
TR5-2 test-loss TR5 37.74 530 330 200 6 5 1
TR1-2 test-loss TR1 36.43 1101.12 700 401.12 10 9 1
TR1-1 test-loss TR1 20.07 1000.88 800 200.88 9 9 0
TR6-2 test-loss TR6 52.32 592.4 282.43 309.97 5 4 1
TR6-1 test-loss TR6 31.17 770 530 240 5 4 1

Figure 285 Pop up Energy Consumption Data Details

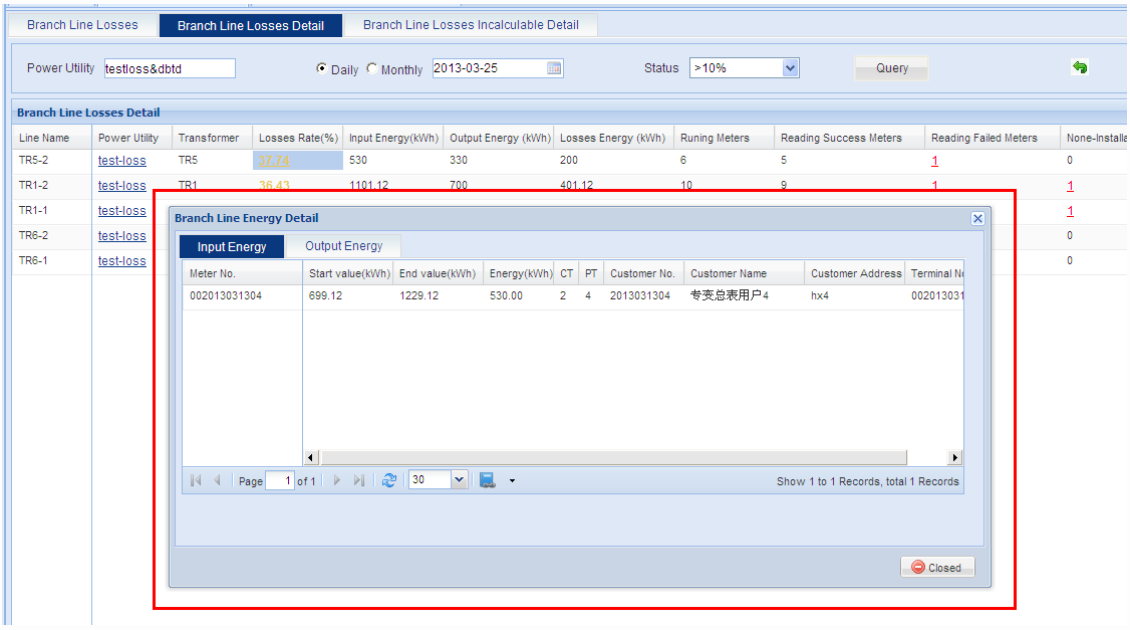

Branch Line Losses
Branch Line Losses Detail
Branch Line Losses Incalculable Detail
Power Utility testloss&dbtd
Daily Monthly 2013-03-25
Status >10%
Query
Branch Line Losses Detail
Line Name Power Utility Transformer Losses Rate(%) Input Energy(kWh) Output Energy (kWh) Losses Energy (kWh) Runing Meters Reading Success Meters Reading Failed Meters None-Installe
TR5-2 test-loss TR5 37.74 530 330 200 6 5 1 0
TR1-2 test-loss TR1 36.43 1101.12 700 401.12 10 9 1 1
TR1-1 test-loss 1 1
TR6-2 test-loss 0
TR6-1 test-loss 0
Branch Line Energy Detail
Input Energy
Output Energy
Meter No. Start value(kWh) End value(kWh) Energy(kWh) CT PT Customer No. Customer Name Customer Address Terminal No
002013031304 699.12 1229.12 530.00 2 4 2013031304 专变总表用户4 hx4 002013031
Page 1 of 1
30
Show 1 to 1 Records, total 1 Records
Closed

Figure 286 Energy Consumption Data Details

3) Line loss abnormal analysis: click the link of number in the columns “Reading Failed Meters”, “None-Installation Meters”, “Trapper Suspect Meters”, “No-Communication Within 24 Hours”, to open the abnormal line loss analysis window.

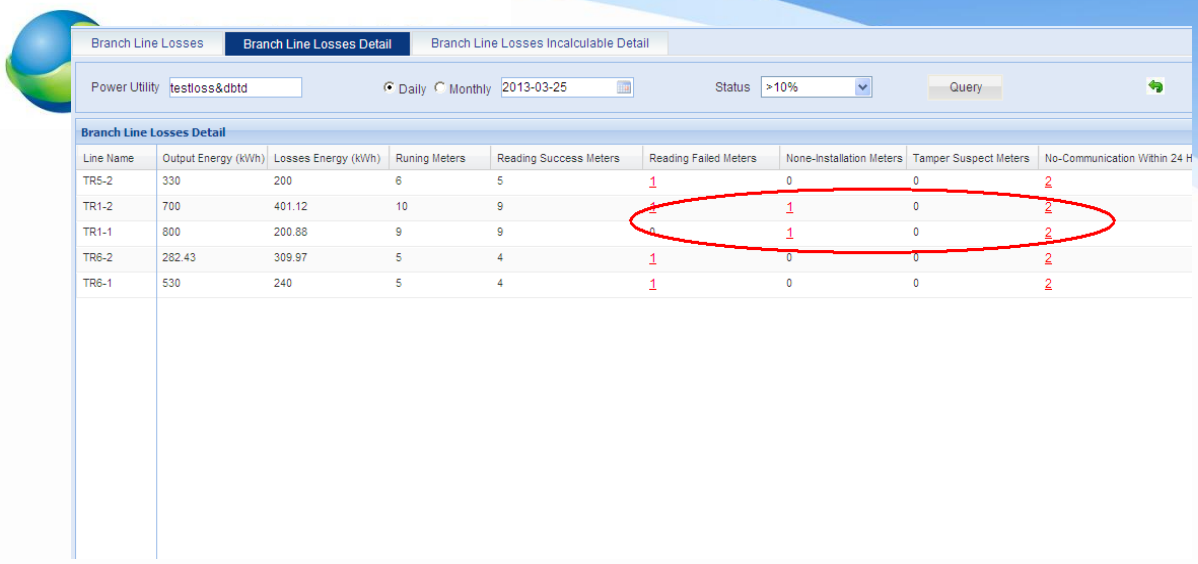

Branch Line Losses
Branch Line Losses Detail
Branch Line Losses Incalculable Detail
Power Utility testloss&dbtd
Daily Monthly 2013-03-25
Status >10%
Query
Branch Line Losses Detail
Line Name | Output Energy (kWh) | Losses Energy (kWh) | Runing Meters | Reading Success Meters | Reading Failed Meters | None-Installation Meters | Tamper Suspect Meters | No-Communication Within 24 H
TR5-2 | 330 | 200 | 6 | 5 | 1 | 0 | 0 | 2
TR1-2 | 700 | 401.12 | 10 | 9 | 1 | 1 | 0 | 2
TR1-1 | 800 | 200.88 | 9 | 9 | 0 | 1 | 0 | 2
TR6-2 | 282.43 | 309.97 | 5 | 4 | 1 | 0 | 0 | 2
TR6-1 | 530 | 240 | 5 | 4 | 1 | 0 | 0 | 2

Figure 287 Pop up Abnormal Line Loss Analysis

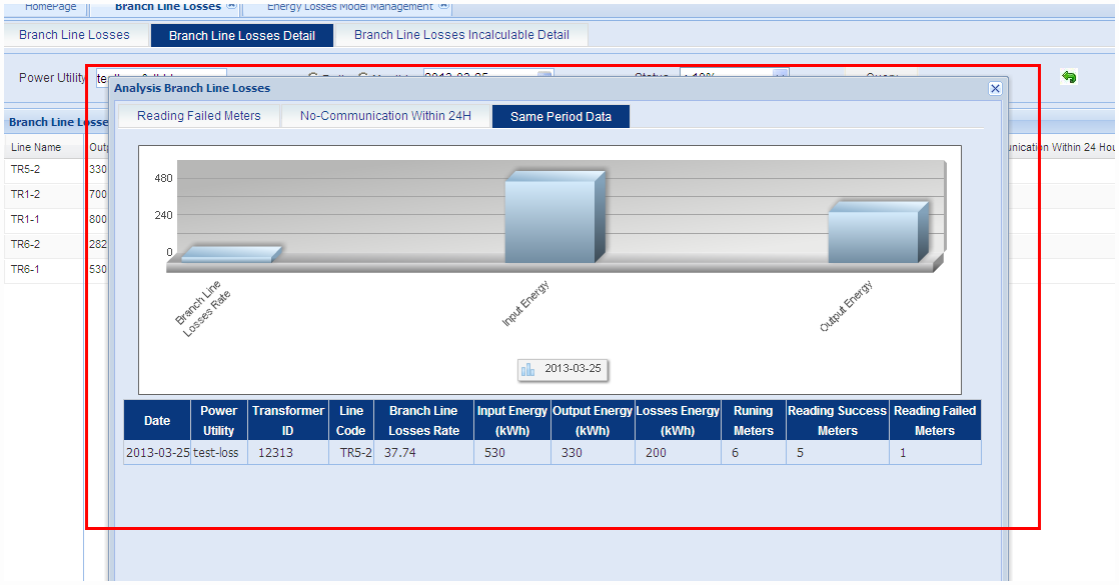

Branch Line Losses
Branch Line Losses Detail
Branch Line Losses Incalculable Detail
Analysis Branch Line Losses
Reading Failed Meters
No-Communication Within 24H
Same Period Data
480
240
0
Branch Line Losses Rate
Input Energy
Output Energy
2013-03-25
Date | Power Utility | Transformer ID | Line Code | Branch Line Losses Rate | Input Energy (kWh) | Output Energy (kWh) | Losses Energy (kWh) | Runing Meters | Reading Success Meters | Reading Failed Meters
2013-03-25 | test-loss | 12313 | TR5-2 | 37.74 | 530 | 330 | 200 | 6 | 5 | 1

Figure 288 Abnormal Line Loss Analysis

3. Incalculable Line Loss Details

1) Query: Select condition: Power Utility, daily or monthly, click “Query” button, and the query results will be shown in the page. The incalculable line loss details of transformer branch line of current Power Utility will also be shown.

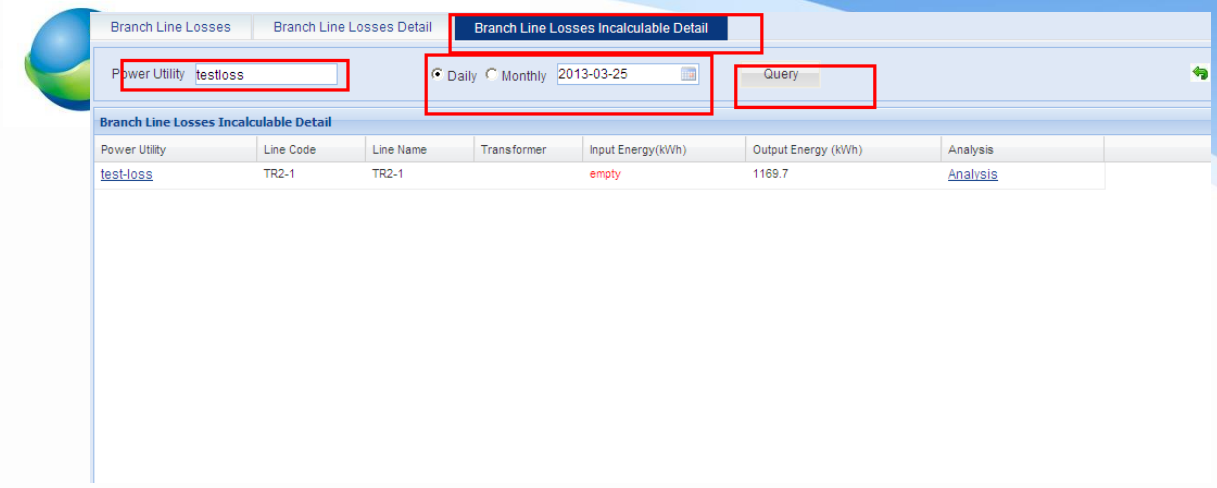


Figure 289 Incalculable Line Loss Details

2) Incalculable line loss analysis: click "Analysis" link and there will be a pop-up window showing the reasons.

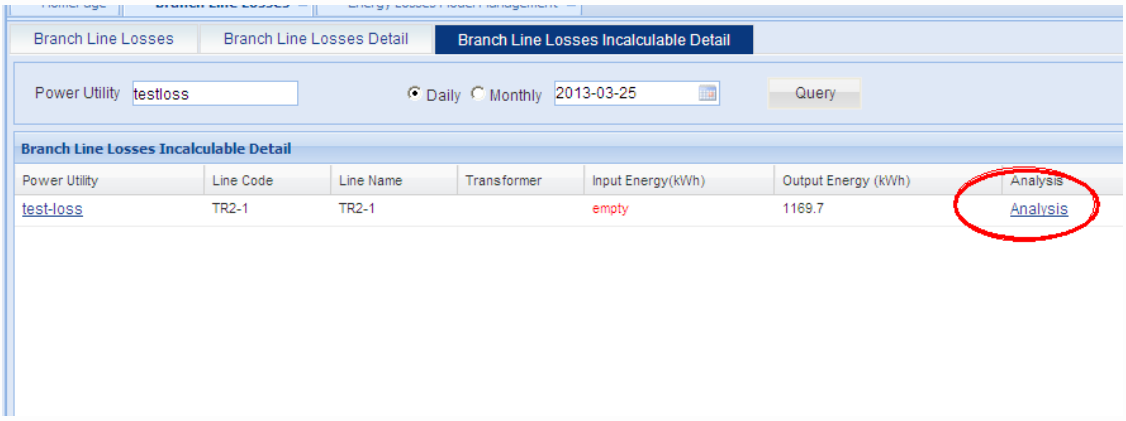


Figure 290 Incalculable Line Loss Analysis

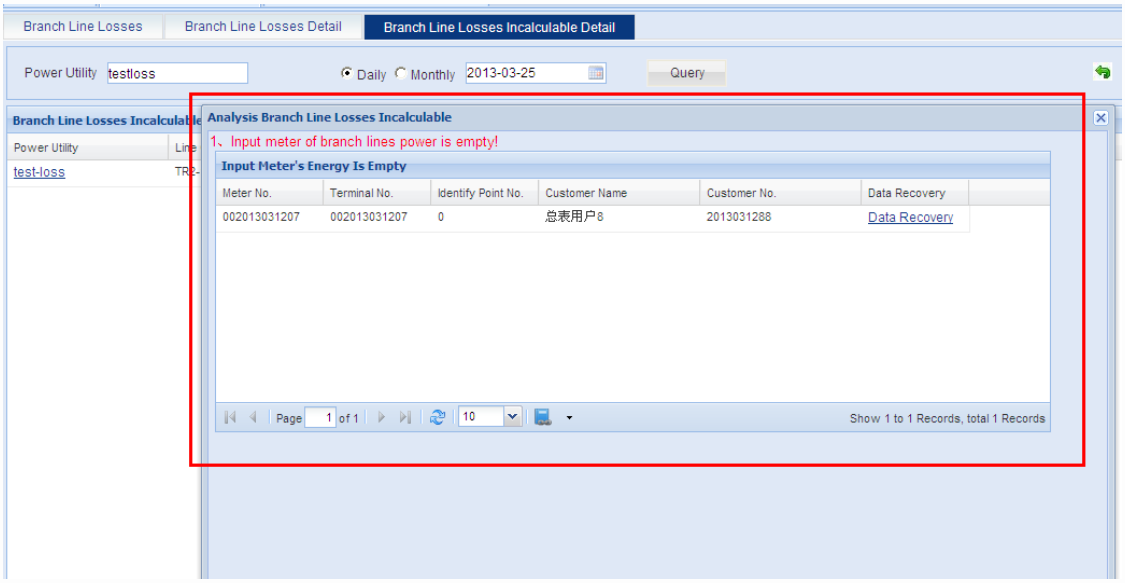


Figure 291 Incalculable Feeder Line Details

3) Restore meter energy consumption data: click "Data Recovery" link to open the window for restoring meter energy consumption data. Select the time point where the energy consumption data is 0, input value (or get the value by clicking Read

or Estimation), then click "Save" button and save the input data.

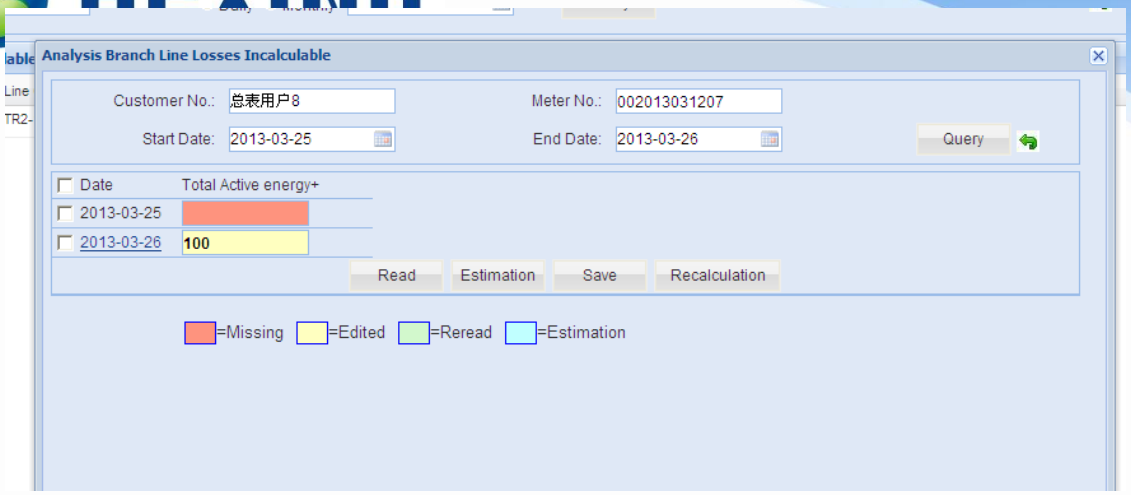


Figure 292 Data Code

4) Data recalculation: after the energy consumption data is saved successfully, click "Recalculation" button to recalculate the data.

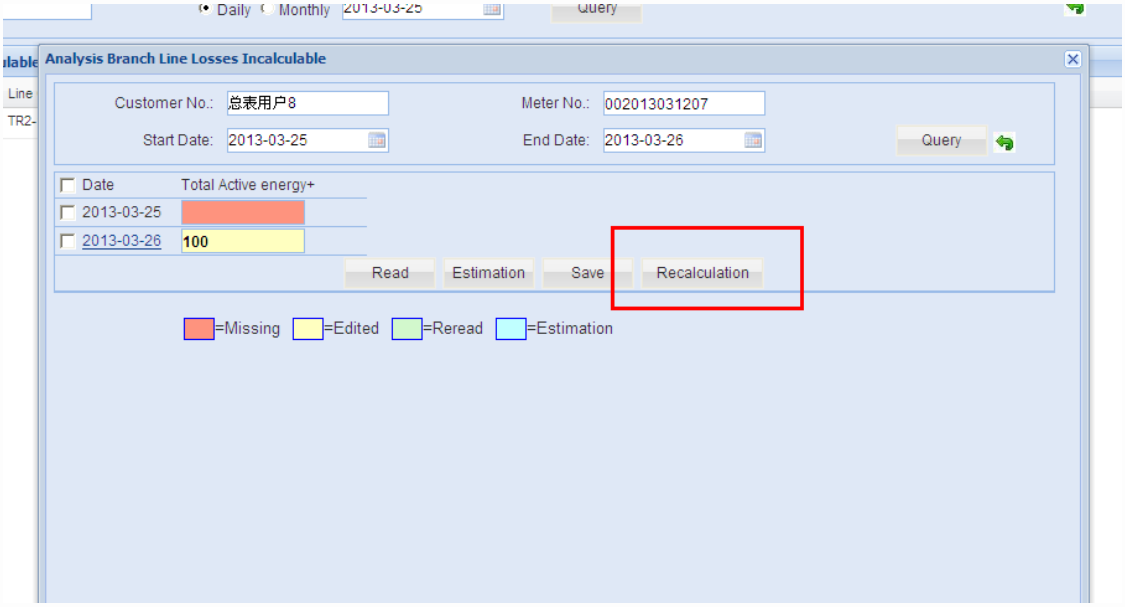


Figure 293 Data Recalculation

14. Firmware Upgrade

14.1. Data Concentrator Firmware Upgrade

[Menu]Advance> Firmware Upgrade>Concentrator Firmware Upgrade

[Function] it supports remote upgrade of data concentrator firmware.

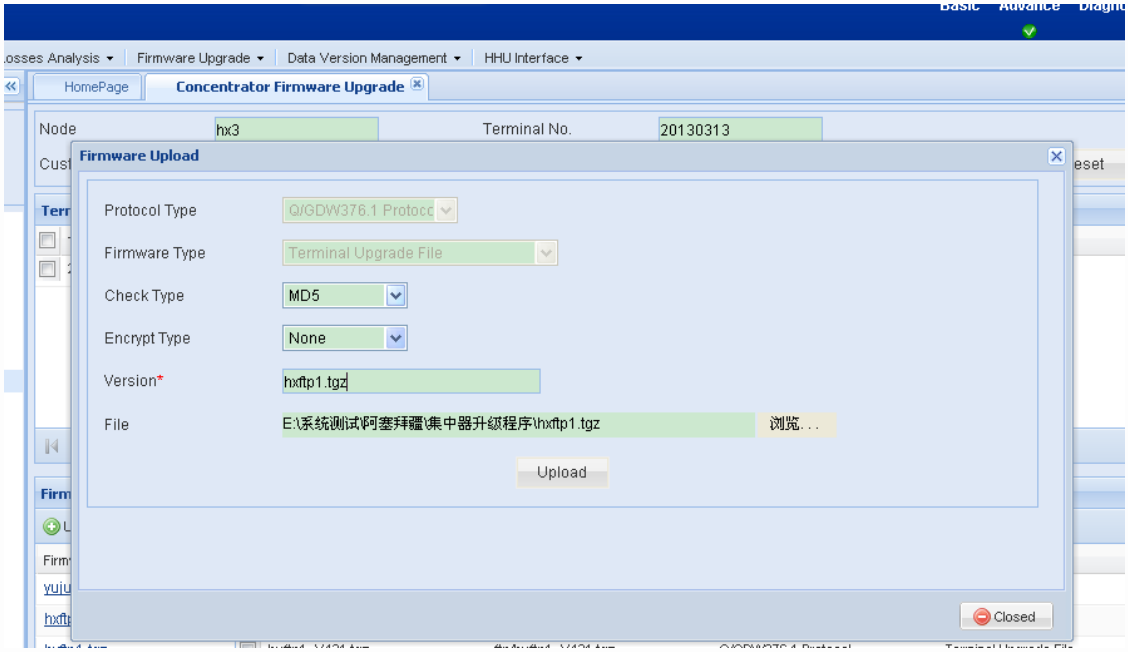
[Step]

1) Select firmware upgrade object

Select one Power Utility Node, or select terminal by clicking equipment in the tree at left, or click query in the tree at left, and choose one specific terminal to check the query information: Node, Terminal No., Customer Type, and Protocol Type.

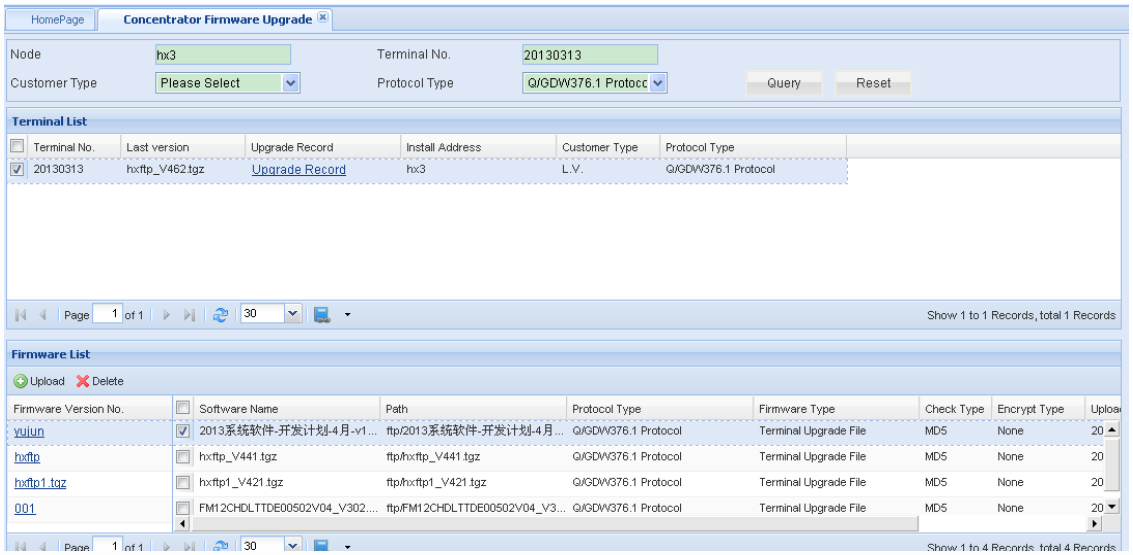
2) Upload firmware file

Click “Upload” button in the Firmware List, there will be a popup window, upload the correct firmware file and click “Upload” as shown below.



3) Firmware upgrade operation

Select the terminal that was loaded, and choose the firmware file that needs to be upgraded. Click “ftp upgrade or upgrade” button to make upgrade operation. Both ways are acceptable. Please refer to below picture.



4) Delete uploaded file

Select the file that needs to be deleted and click “Delete” button to delete it.

Note!

3. Before upload the file, please make sure that the file version no. is consistent with

the file that will be uploaded; otherwise the master station can't determine if the upgrade is successful or not.

4. You are not able to delete the file that is in the upgrade process.

14.2. Meter Firmware Upgrade

[Menu]Advance> Firmware Upgrade>Meter Firmware Upgrade

[Function] it supports remote upgrade of Meter Firmware

[Step]

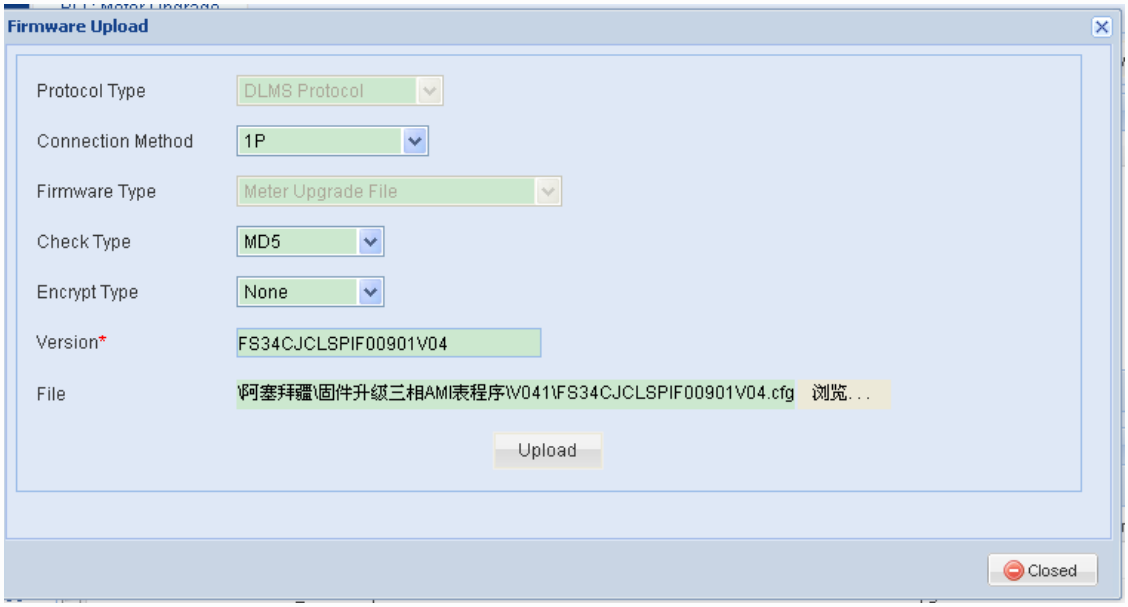
- Upgrade for GPRS meter

1) Select firmware upgrade object

Select one Power Utility Node, or select terminal by clicking equipment in the tree at left, or click query in the tree at left, and choose one specific terminal to check the query information: Node, Meter No., Customer Type, and Protocol Type.

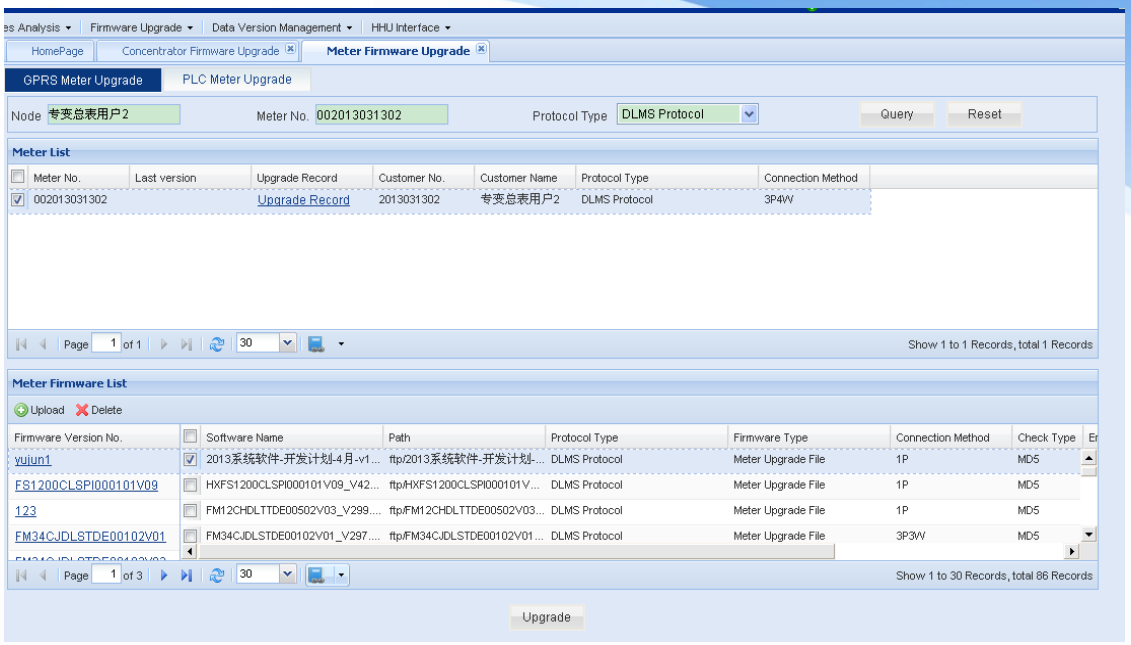
2) Upload firmware file

Click "Upload" button in the Meter Firmware List, and there will be a popup window. Upload the correct firmware file and click "Upload" as shown below.



3) Firmware upgrade operation

Select the terminal that was loaded, and choose the firmware file that needs to be upgraded. Click "Upgrade" button. Please refer to below picture.



4) Delete uploaded file

Please refer to that for data concentrator firmware upgrade.

➢ Upgrade for PLC meter

1) Select firmware upgrade object

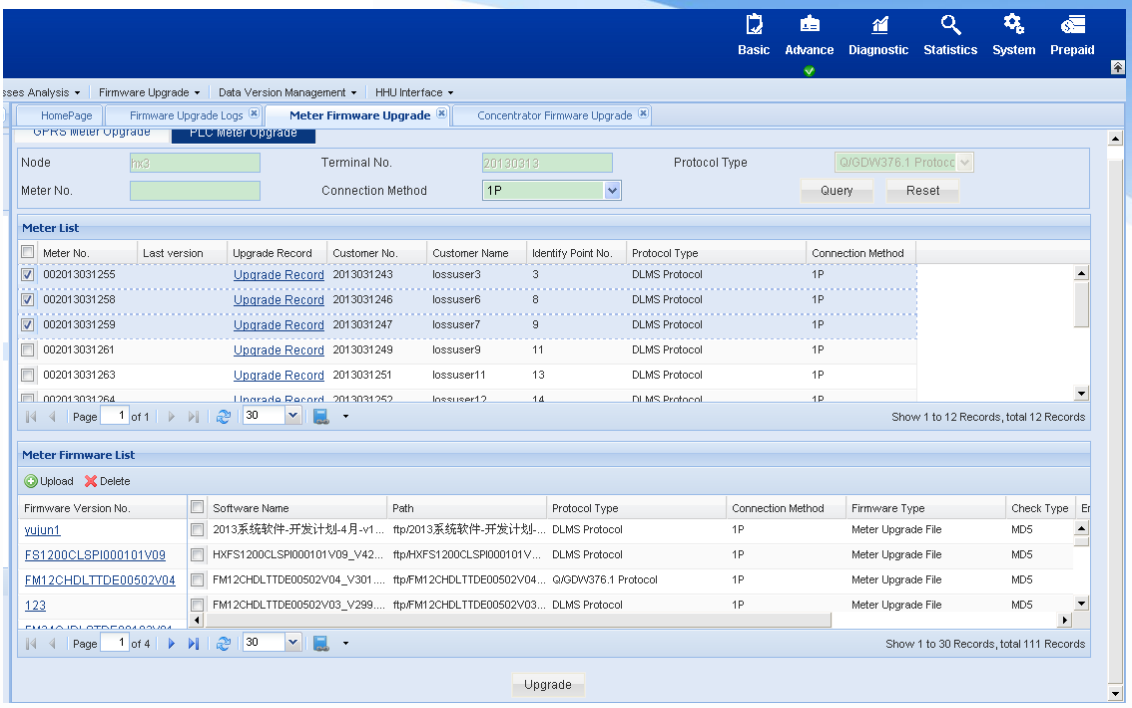
Select terminal by clicking equipment in the tree at left, or click query in the tree at left, and choose one specific terminal to check the query information: Node, Terminal No., Protocol Type, Meter No, and Connection Method.

2) Upload firmware file

Please refer to that for GPRS meter.

3) Firmware upgrade operation

Select the meters in the list (many meters can be selected at one time), choose the firmware file that needs to be upgraded. Click “Upgrade” button. Please refer to below picture.



4) Delete uploaded file

Please refer to that for data concentrator firmware upgrade

Note!

1. Before upload the file, please make sure that the file version no. is consistent with the file that will be uploaded; otherwise the master station can't determine if the upgrade is successful or not.
2. When you are filling up the information, please make sure to write correctly whether single phase meter and three phase meter are calibrated or not. Otherwise you are not able to upgrade or the upgrade may fail.

14.3. Firmware Upgrade Logs Query

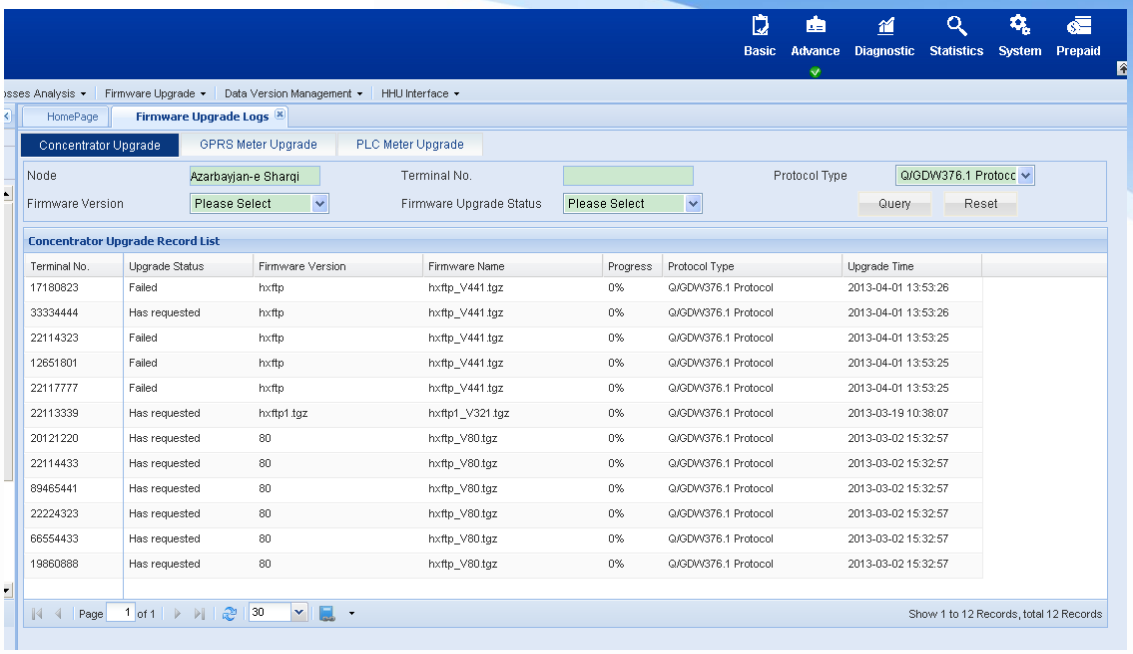
[Menu]Advance> Firmware Upgrade> Firmware Upgrade logs

[Function] it is for checking the firmware upgrade logs for meters or data concentrators.

[Step]

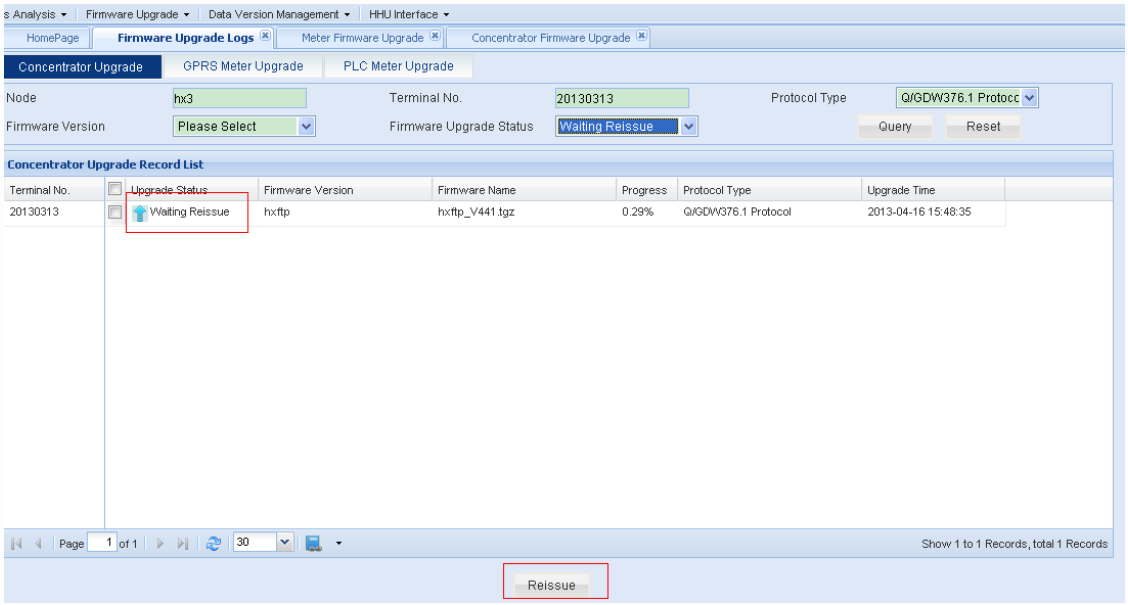
- data concentrator firmware upgrade log

1) Select one Power Utility Node, or select terminal by clicking equipment in the tree at left, or click query in the tree at left, and choose one specific terminal to check the query information: Node, Terminal No., Protocol Type, Firmware Version, and Firmware Upgrade Status. You can check the upgrade log with different query conditions.
2) In below query list, you can check the terminals with different upgrade status.


Basic
Advance
Diagnostic
Statistics
System
Prepaid
HomePage
Firmware Upgrade Logs
Concentrator Upgrade
GPRS Meter Upgrade
PLC Meter Upgrade
Node
Azarbayjan-e Sharqi
Terminal No.
Protocol Type
Q/GDW376.1 Protocc
Firmware Version
Please Select
Firmware Upgrade Status
Please Select
Query
Reset
Concentrator Upgrade Record List
Terminal No.
Upgrade Status
Firmware Version
Firmware Name
Progress
Protocol Type
Upgrade Time
17180823 Failed hxftp hxftp_V441.tgz 0% Q/GDW376.1 Protocol 2013-04-01 13:53:26
33334444 Has requested hxftp hxftp_V441.tgz 0% Q/GDW376.1 Protocol 2013-04-01 13:53:26
22114323 Failed hxftp hxftp_V441.tgz 0% Q/GDW376.1 Protocol 2013-04-01 13:53:25
12651801 Failed hxftp hxftp_V441.tgz 0% Q/GDW376.1 Protocol 2013-04-01 13:53:25
22117777 Failed hxftp hxftp_V441.tgz 0% Q/GDW376.1 Protocol 2013-04-01 13:53:25
22113339 Has requested hxftp1.tgz hxftp1_V321.tgz 0% Q/GDW376.1 Protocol 2013-03-19 10:38:07
20121220 Has requested 80 hxftp_V80.tgz 0% Q/GDW376.1 Protocol 2013-03-02 15:32:57
22114433 Has requested 80 hxftp_V80.tgz 0% Q/GDW376.1 Protocol 2013-03-02 15:32:57
89465441 Has requested 80 hxftp_V80.tgz 0% Q/GDW376.1 Protocol 2013-03-02 15:32:57
22224323 Has requested 80 hxftp_V80.tgz 0% Q/GDW376.1 Protocol 2013-03-02 15:32:57
66554433 Has requested 80 hxftp_V80.tgz 0% Q/GDW376.1 Protocol 2013-03-02 15:32:57
19860888 Has requested 80 hxftp_V80.tgz 0% Q/GDW376.1 Protocol 2013-03-02 15:32:57
Page 1 of 1
30
Show 1 to 12 Records, total 12 Records

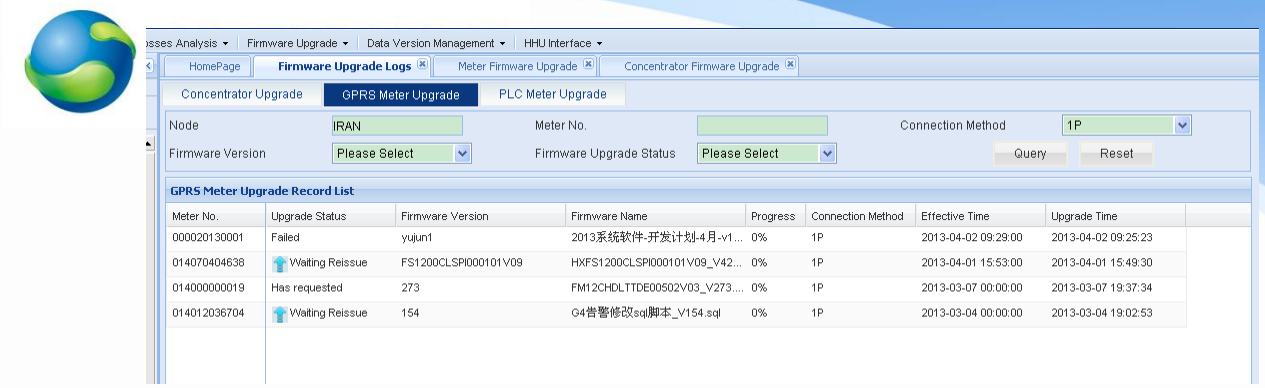
3) Reissue upgrade operation

For the upgrade failure due to communication failure or other reasons, you can click the "Reissue operation" in the list or click the "reissue" button to make Reissue upgrade operation. Please refer to below picture.



➢ GPRS meter firmware upgrade log

1) Select one Power Utility Node, or select terminal by clicking equipment in the tree at left, or click query in the tree at left, and choose one specific terminal to check the query information: Node, Meter No. , Connection Method, Firmware Version, Firmware Upgrade Status. You can check the upgrade log with different query conditions.
2) Please refer to below picture for query list.



3) Reissue upgrade operation
Please refer to that for data concentrators

- PLC meter firmware upgrade log

Please refer to that for GPRS meters.

15. Meter Reading Data Management

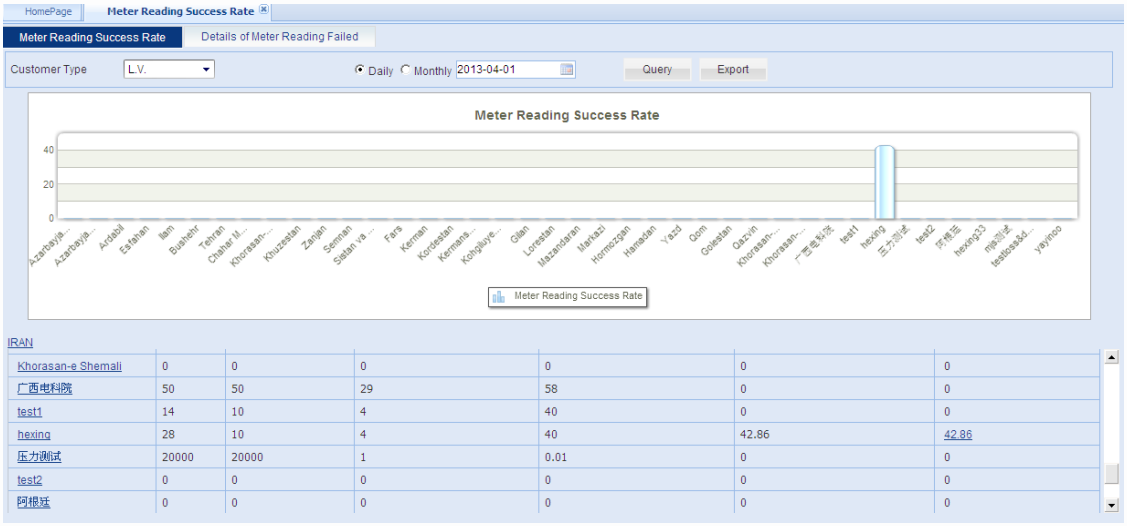
15.1. Meter Reading Success Rate

[Menu]Advance> Meter Reading Management> Meter Reading Success Rate

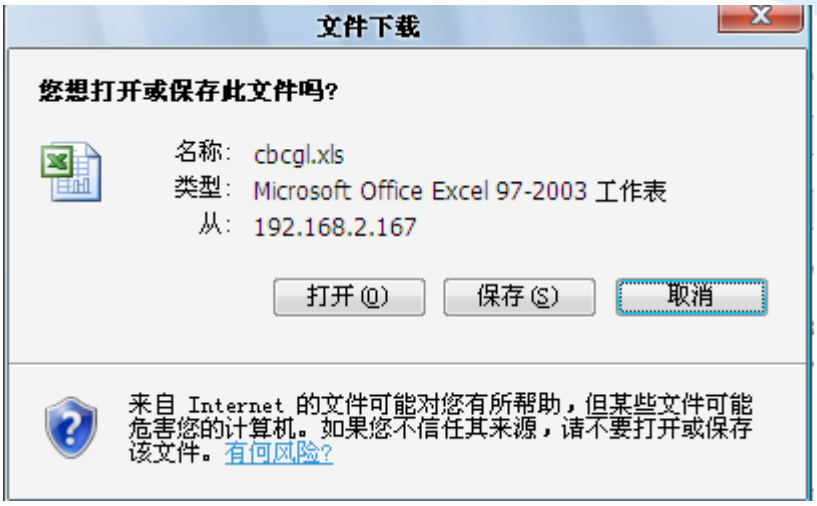
[Function] this is for recording the meter reading success rate of the Dept., data drilling-down, and recording meter reading failure details.

[Step]

Query: select the query conditions “Customer Type, Daily or Monthly”, click “Query” button, and the query result will be shown in the interface.

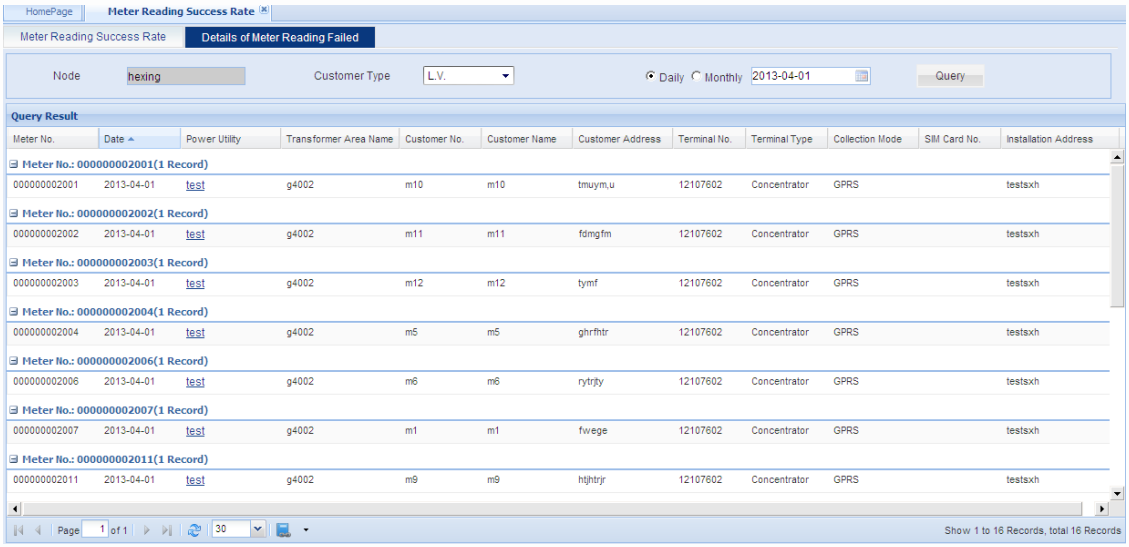


Export: click “Export” button to export the query result.



Meter reading failure details: click “Meter Reading Success Rate (%)” column to enter the interface for meter reading failure details.

Query: select the query conditions “Node, Customer Type, Daily or Monthly”, click “Query” button, and the query result will be shown in the interface.


HomePage
Meter Reading Success Rate
Meter Reading Success Rate
Details of Meter Reading Failed
Node
hexing
Customer Type
L.V.
Daily
Monthly
2013-04-01
Query
Query Result
Meter No. | Date | Power Utility | Transformer Area Name | Customer No. | Customer Name | Customer Address | Terminal No. | Terminal Type | Collection Mode | SIM Card No. | Installation Address
Meter No.: 000000002001(1 Record)
000000002001 2013-04-01 test g4002 m10 m10 tmuym,u 12107602 Concentrator GPRS testsxh
Meter No.: 000000002002(1 Record)
000000002002 2013-04-01 test g4002 m11 m11 fdmgfm 12107602 Concentrator GPRS testsxh
Meter No.: 000000002003(1 Record)
000000002003 2013-04-01 test g4002 m12 m12 tymf 12107602 Concentrator GPRS testsxh
Meter No.: 000000002004(1 Record)
000000002004 2013-04-01 test g4002 m5 m5 ghrfhtr 12107602 Concentrator GPRS testsxh
Meter No.: 000000002006(1 Record)
000000002006 2013-04-01 test g4002 m6 m6 rytrjty 12107602 Concentrator GPRS testsxh
Meter No.: 000000002007(1 Record)
000000002007 2013-04-01 test g4002 m1 m1 fwege 12107602 Concentrator GPRS testsxh
Meter No.: 000000002011(1 Record)
000000002011 2013-04-01 test g4002 m9 m9 htjhtrjr 12107602 Concentrator GPRS testsxh
Page 1 of 1
30
Show 1 to 16 Records, total 16 Records

15.2. Batch Query of Meter Reading Data

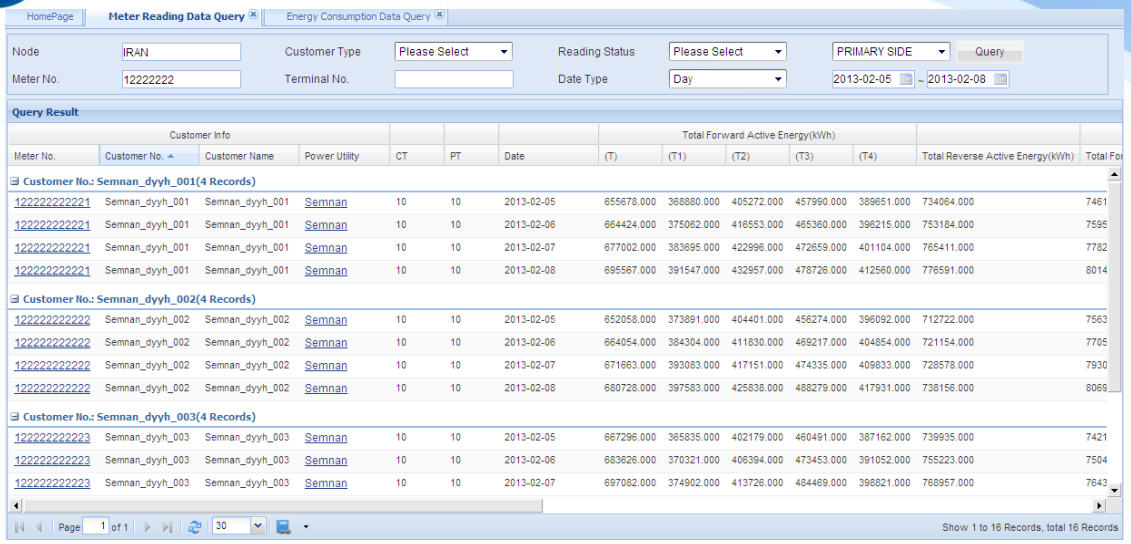
[Menu]Advance> Meter Reading Management> Meter Reading Data Query

[Function] this is for batch query of meter reading data.

[Step]

Query: select the query conditions “Node, Customer Type, Reading Status, Meter No.,

Terminal No., Date Type", click "Query" button, and the query result will be shown in the interface.



15.3. Batch Query of Energy Consumption Data

[Menu]Advance> Meter Reading Management> Energy Consumption Data Query

[Function] this is for batch query of energy consumption data.

[Step]

Query: select the query conditions "Node, Customer Type, Reading Status, Meter No., Terminal No., Date Type", click "Query" button, and the query result will be shown in the interface.

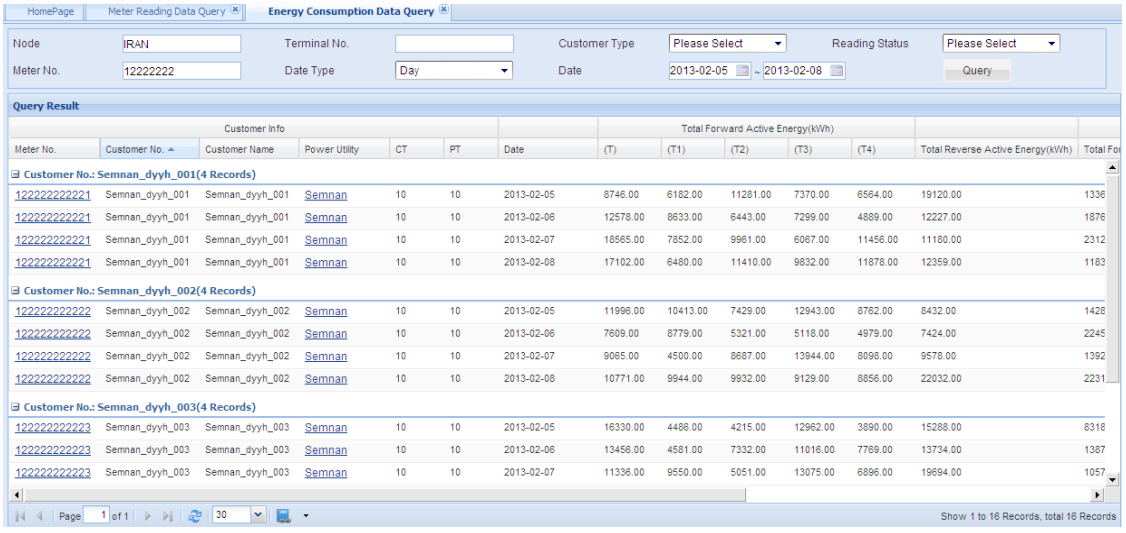


Figure 294 Energy consumption data

16. Data Version Management

16.1. Daily Frozen Data Management

[Menu]Advance>Data Version Management>Day Freeze Data Management

[Function] this is for management of daily frozen data

[Step]

a. Select meter: select meter (that is online) node at the left, the equipment include GPRS meter and data concentrator.

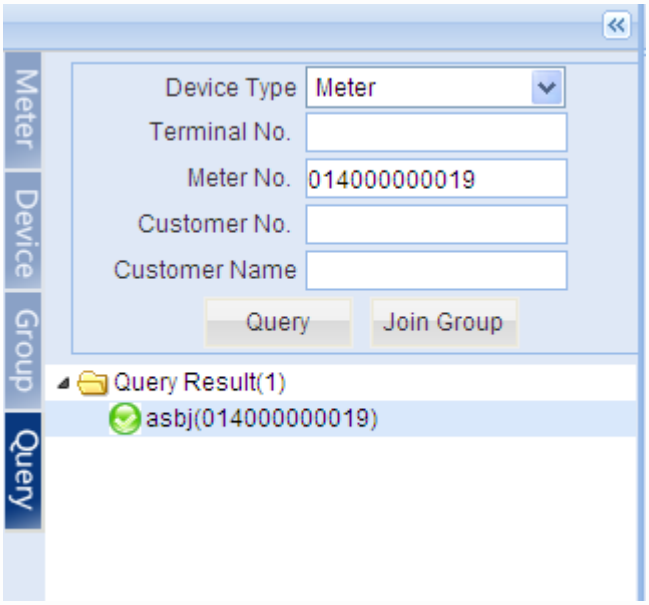


Figure 295 Select meter

b. Check data: select starting date and ending date, and click “Query” button.

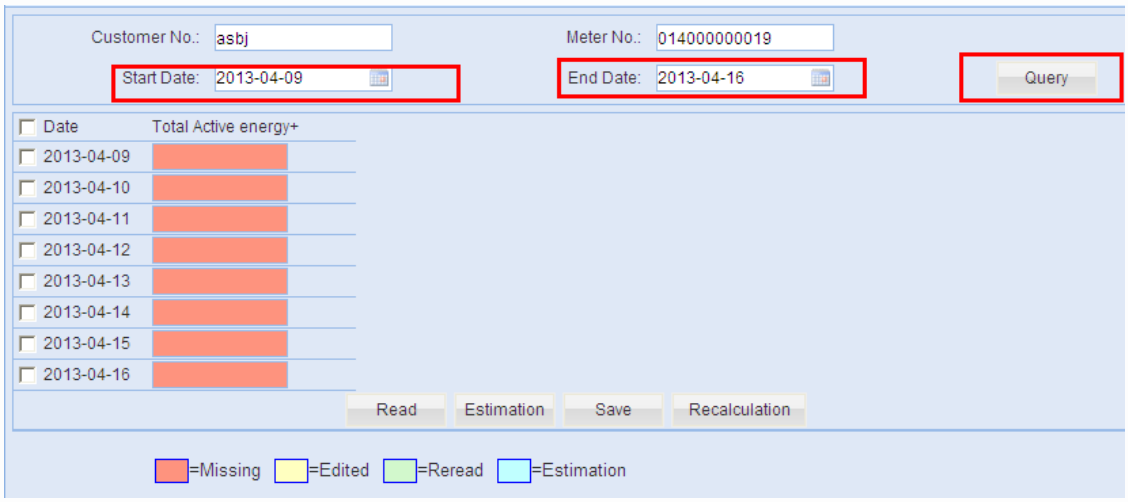


Figure 296 Check data

c. Complete the data

1) Manual editing: select the relevant date and then key in the data directly in the input

box;

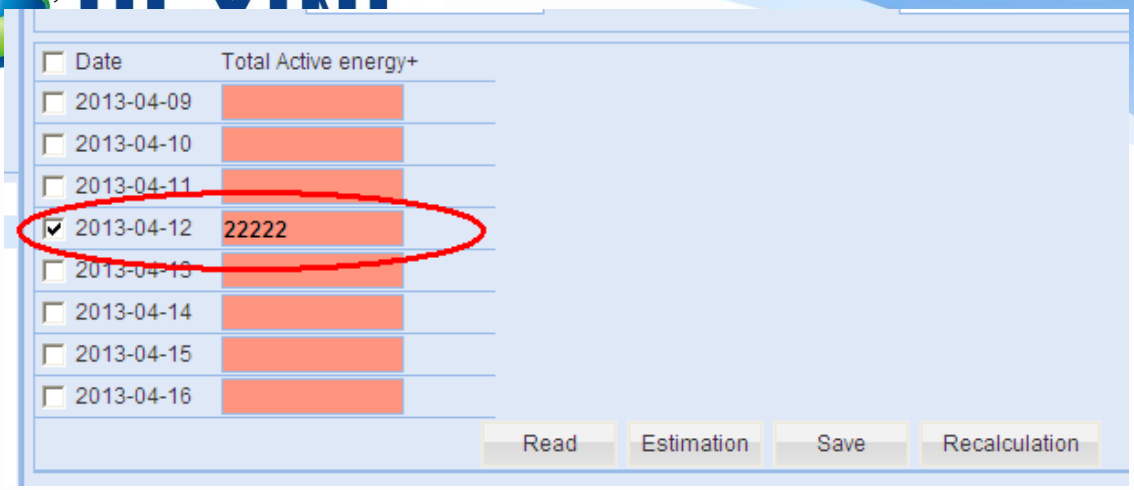


Figure 297 Manual editing

2) Read: select the relevant date that data need to be re-read, then click "Read" button to read the data.

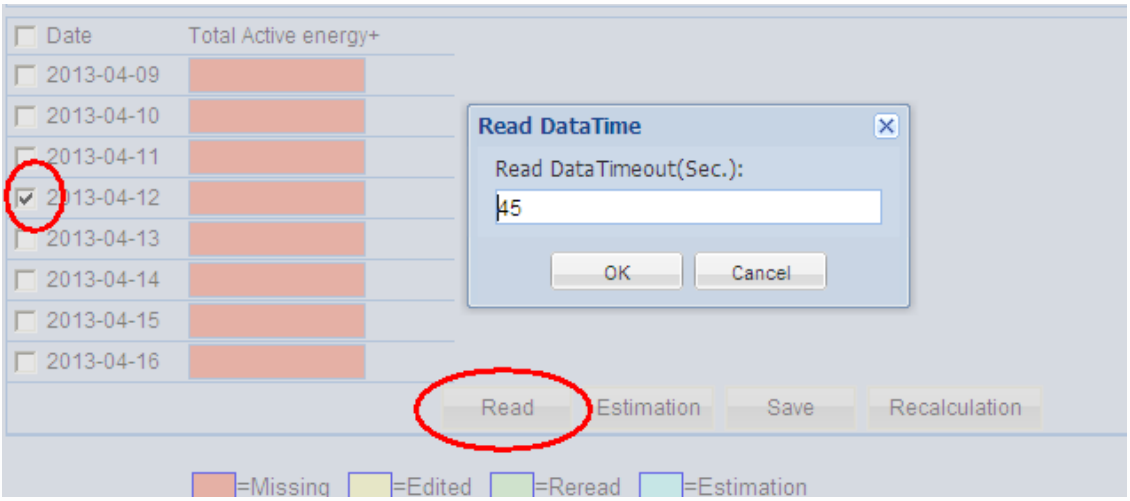


Figure 298 Manual re-reading

3) Estimation: select the relevant date that data need to be estimated, click "Estimation" button and there will be a pop-up window showing estimation data. Select the needed estimation data and click "Confirm" button.

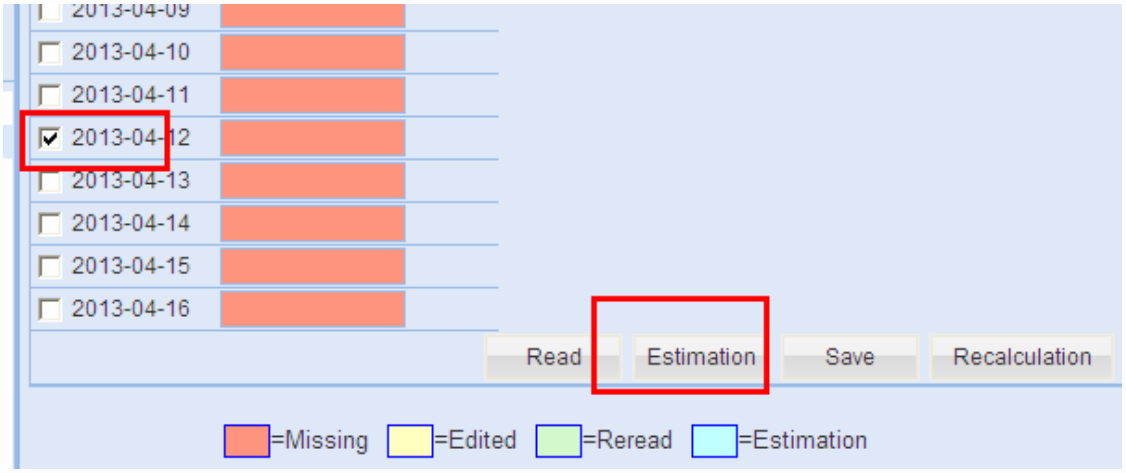


Figure 299 Estimation

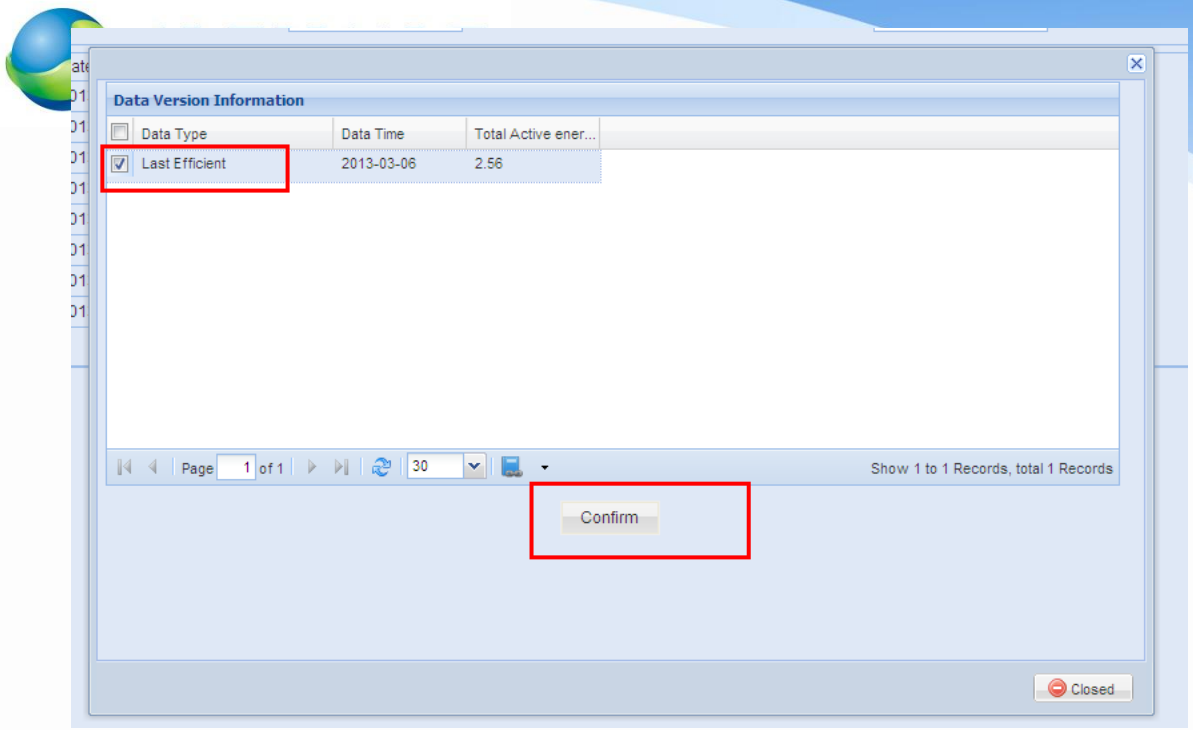


Figure 300 Use the estimation data

d. Save data: select the date that the data need to be saved, click "Save" button to save the data. If it is saved successfully, there will be a prompt message showing "save successfully".

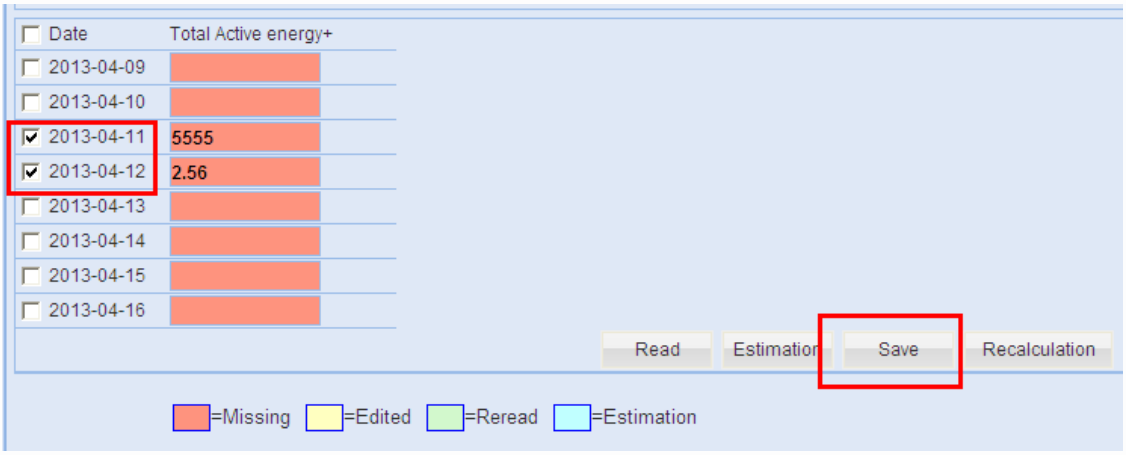


Figure 301 Save data

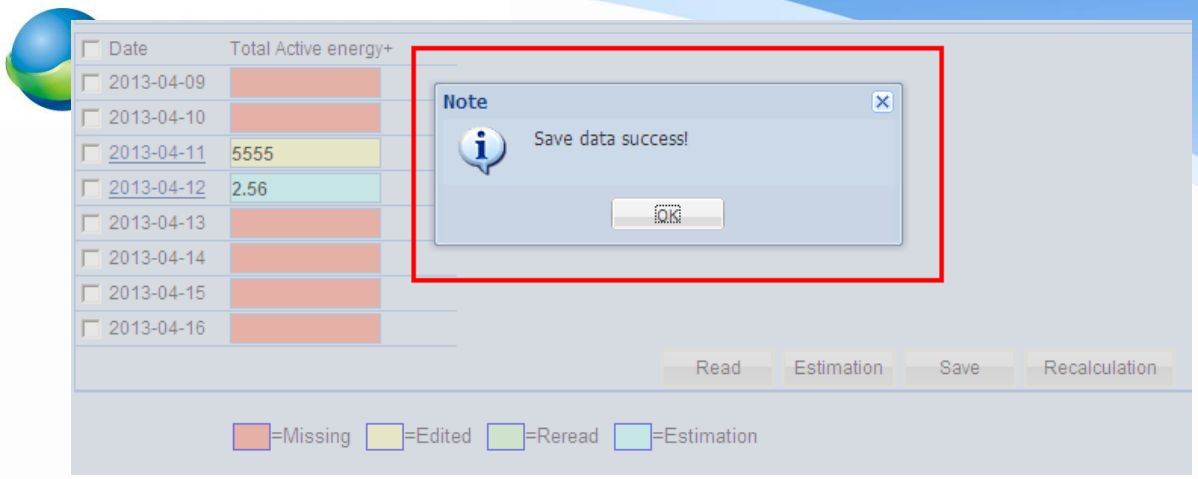


Figure 302 Save successfully

e. Recalculate data: select the date that the data need to be recalculated, click "Recalculation" button to recalculate the data. When the recalculation is completed, there will be a prompt message.

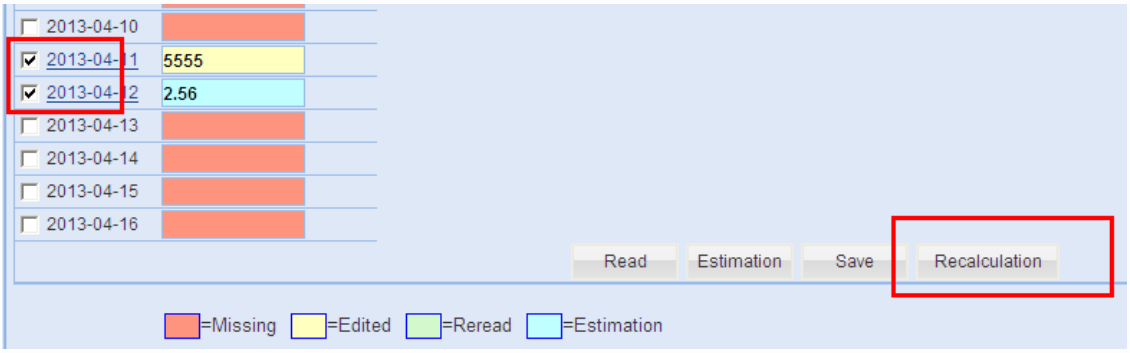


Figure 303 Recalculate data

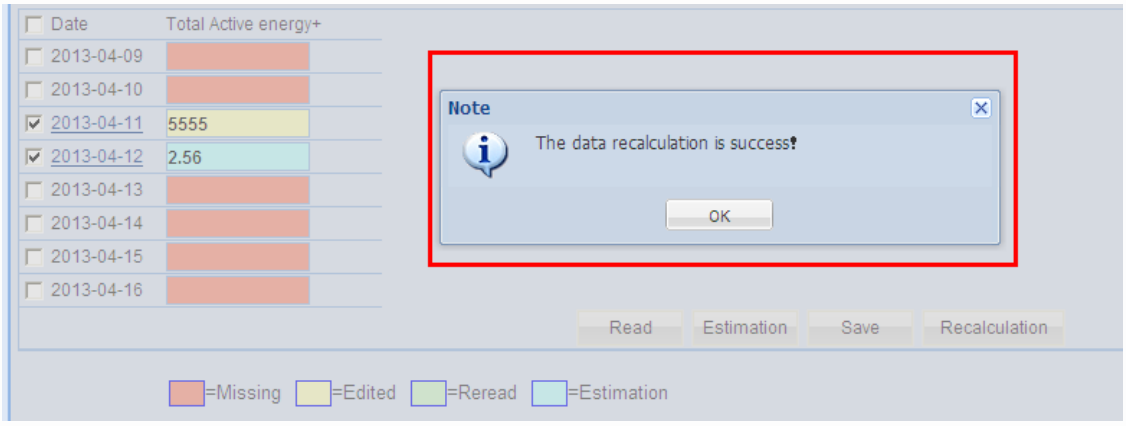


Figure 304 Recalculation complete

16.2. Billing Data Management

[Menu]Advance>Data Version Management>Billing Data Management

[Function] this is for management of billing data

[Step]

a. Select meter: select meter (that is online) node at the left, the equipment include GPRS meter and data concentrator.

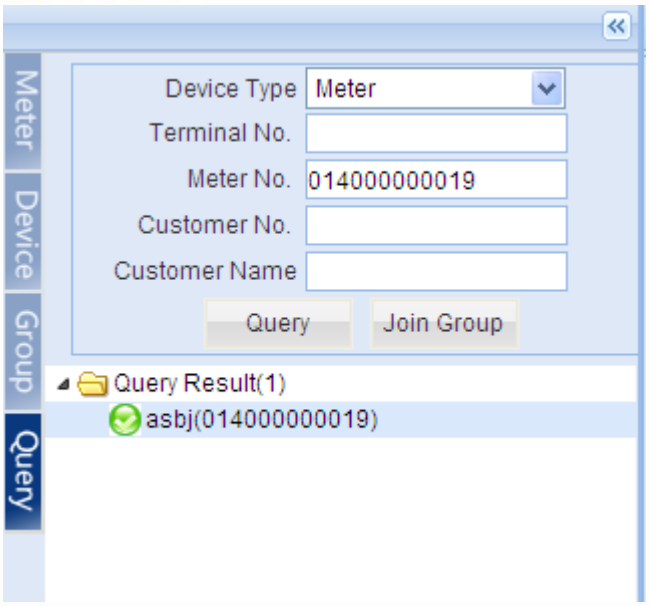


Figure 305 Select meter

b. Check data: select starting date and ending date, and click “Query” button.

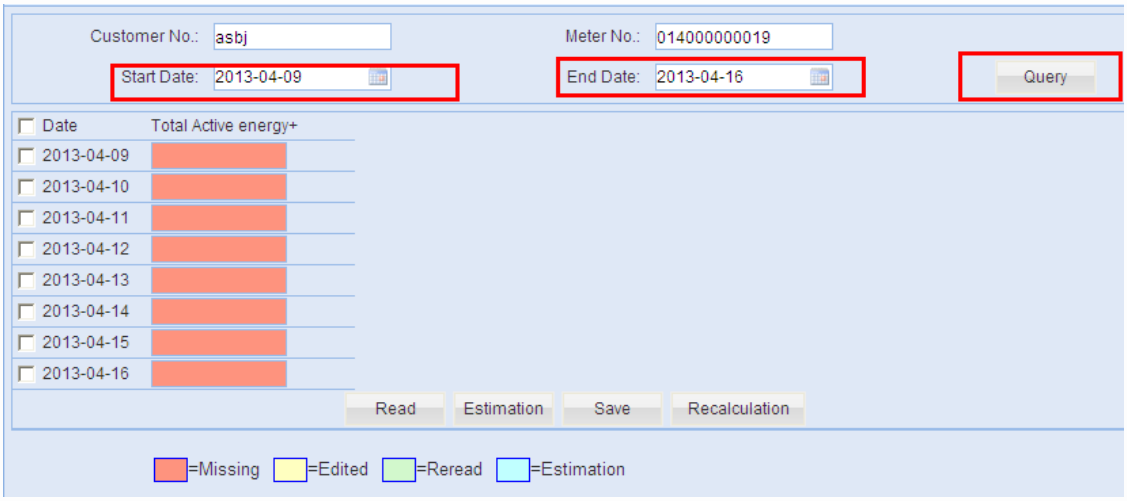


Figure 306 Check data

c. Complete the data

1） manual editing: select the relevant date and then key in the data directly in the input box;

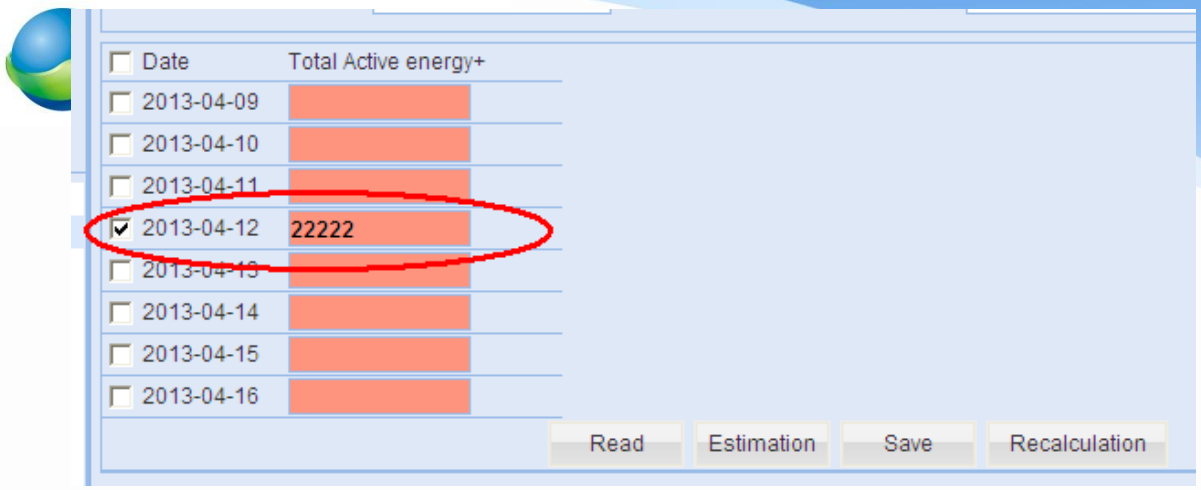


Figure 307 Manual editing

2） Read: select the relevant date that data need to be re-read, then click “Read” button to read the data.

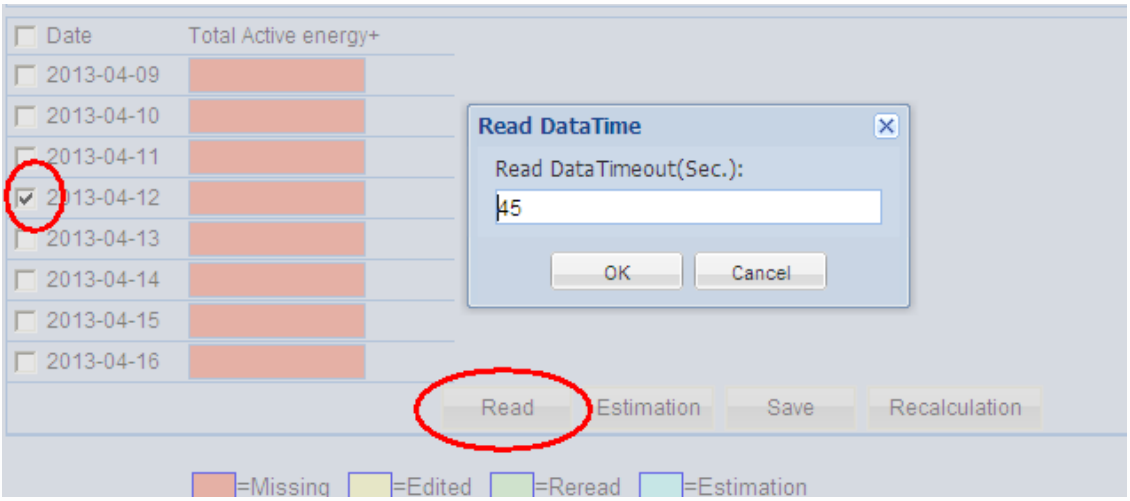


Figure 308 Manual re-reading

3） Estimation: select the relevant date that data need to be estimated, click “Estimation” button and there will be a pop-up window showing estimation data. Select the needed estimation data and click “Confirm” button.

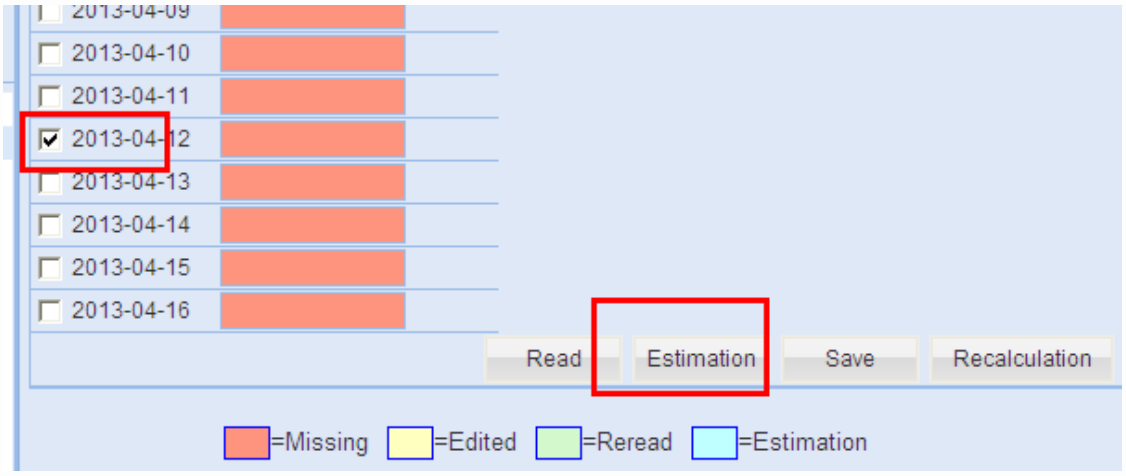


Figure 309 Estimation

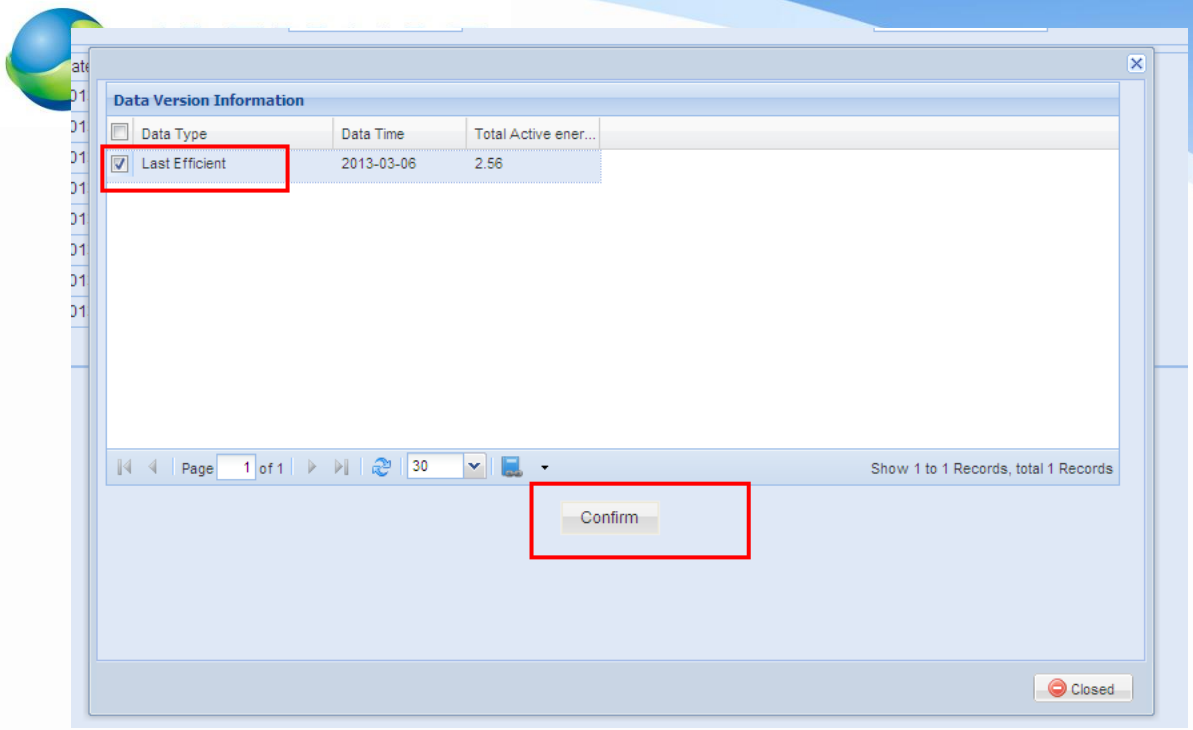


Figure 310 Use the estimation data

d. Save data: select the date that the data need to be saved, click “Save” button to save the data. If it is saved successfully, there will be a prompt message showing “save successfully”.

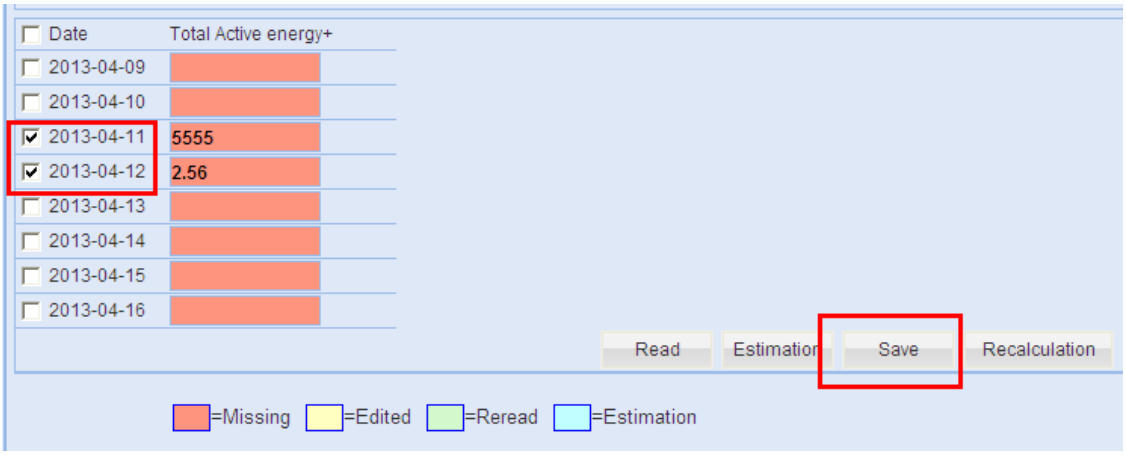


Figure 311 Save data

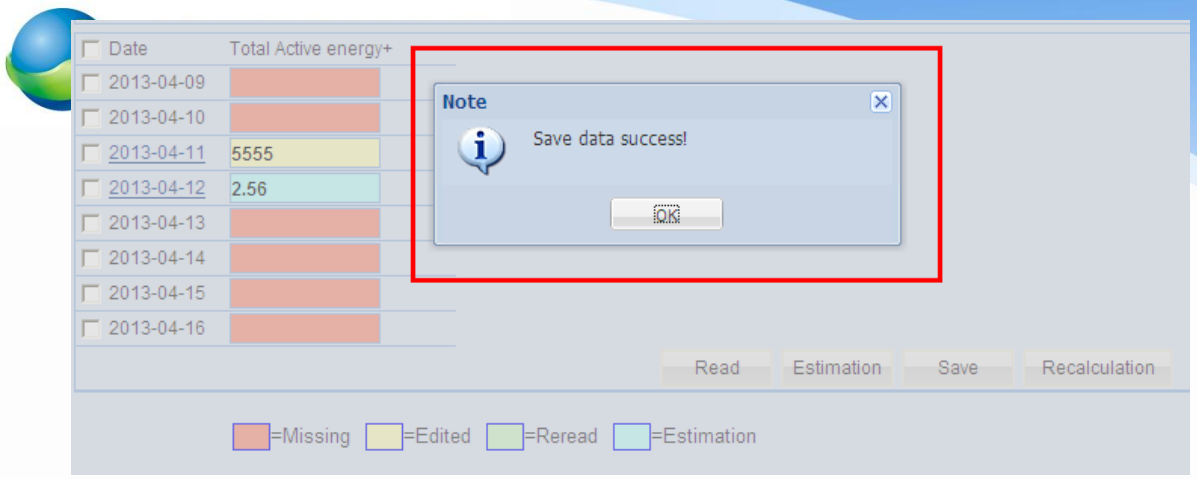


Figure 312 Save successfully

e. Recalculate data: select the date that the data need to be recalculated, click "Recalculation" button to recalculate the data. When the recalculation is completed, there will be a prompt message.

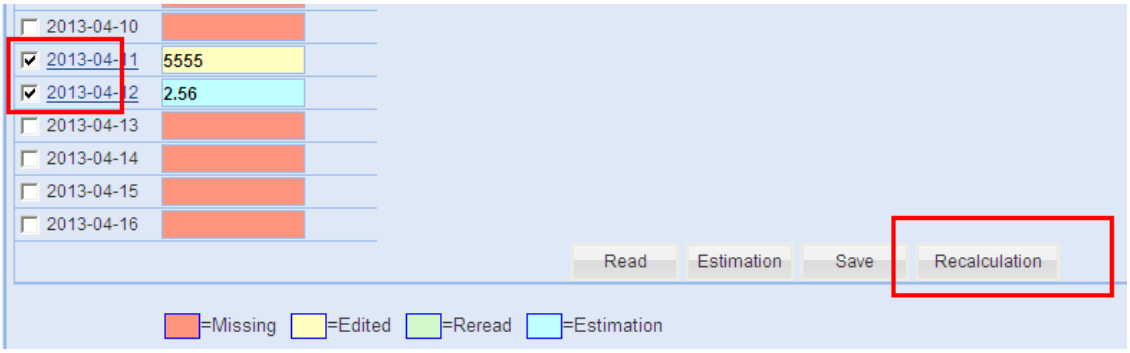


Figure 313 Recalculate data

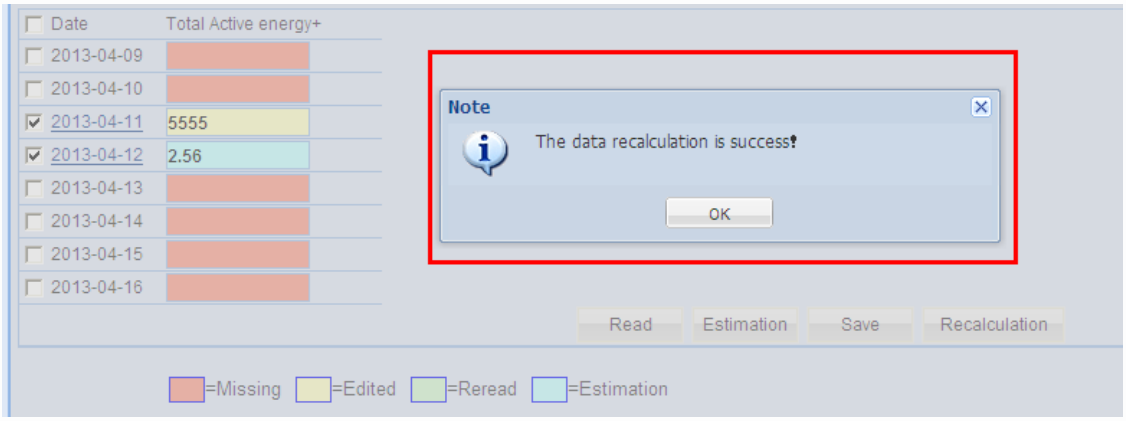


Figure 314 Recalculation complete

16.3. Load Data Management

[Menu]Advance>Data Version Management>Load Data Management

[Function] this is for management of load data

[Step]

a. Select meter: select meter (that is online) node at the left, the equipment include GPRS meter and data concentrator.

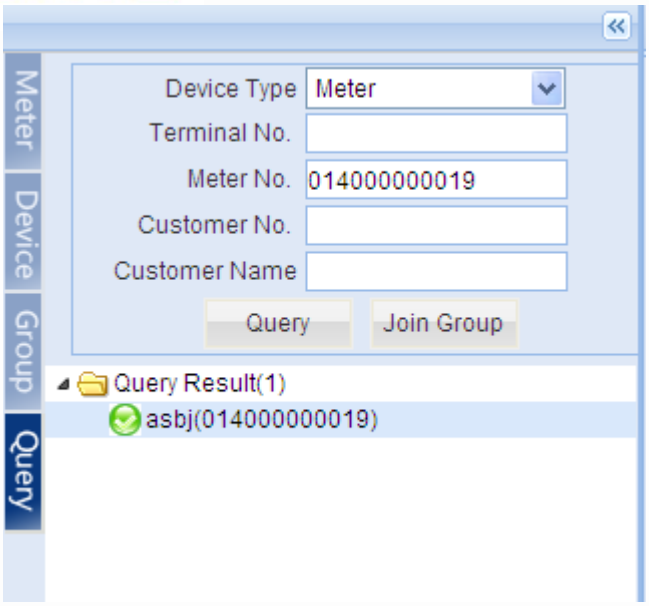


Figure 315 Select meter

b. Check data: select starting date and ending date, and click “Query” button.

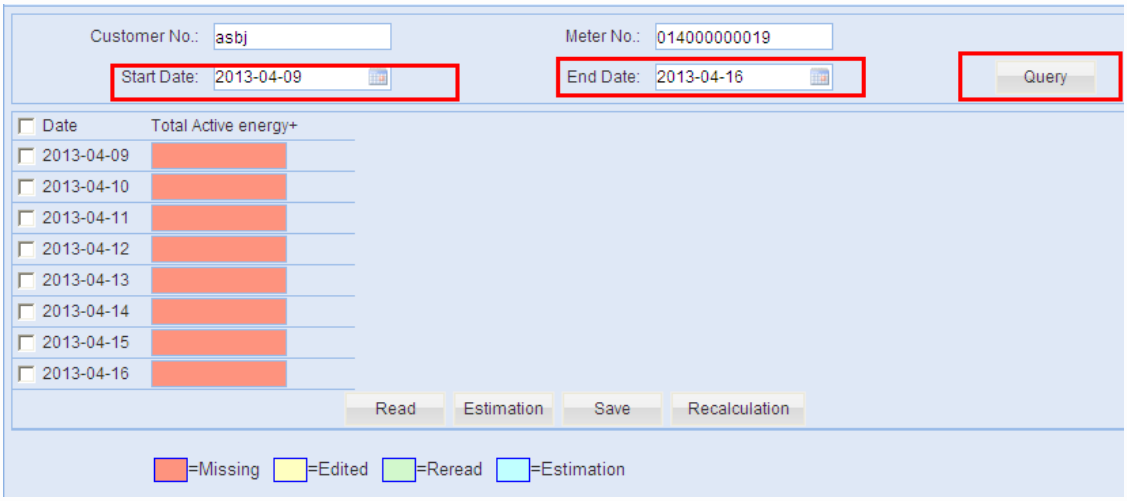


Figure 316 Check data

c. Complete the data

1) Manual editing: select the relevant date and then key in the data directly in the input box;

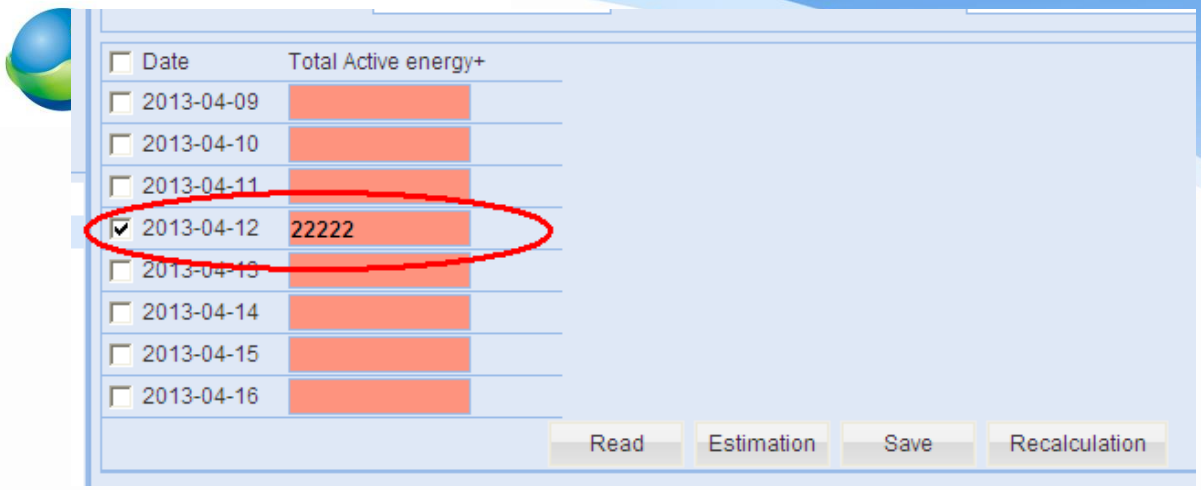


Figure 317 Manual editing

2) Read: select the relevant date that data need to be re-read, then click "Read" button to read the data.

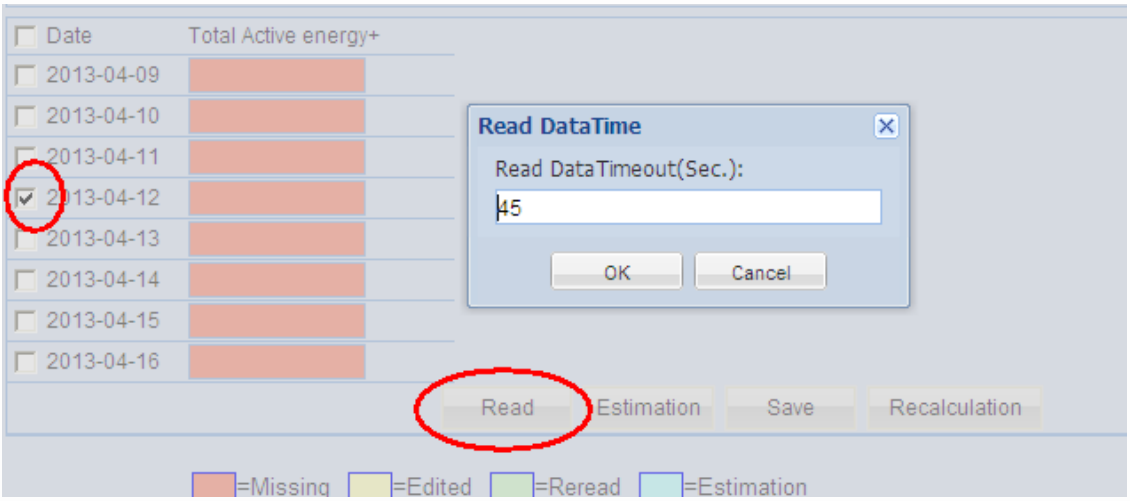


Figure 318 Manual re-reading

3) Estimation: select the relevant date that data need to be estimated, click "Estimation" button and there will be a pop-up window showing estimation data. Select the needed estimation data and click "Confirm" button.

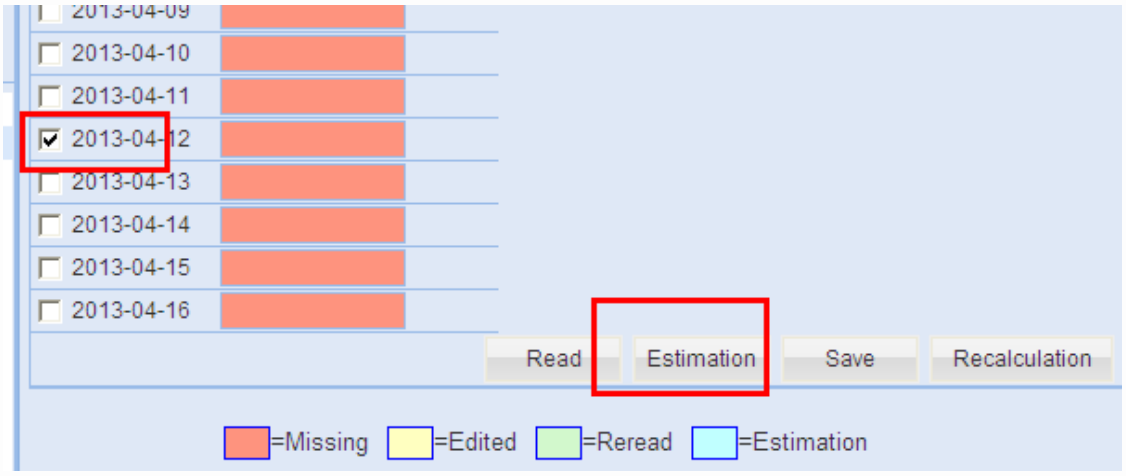


Figure 319 Estimation

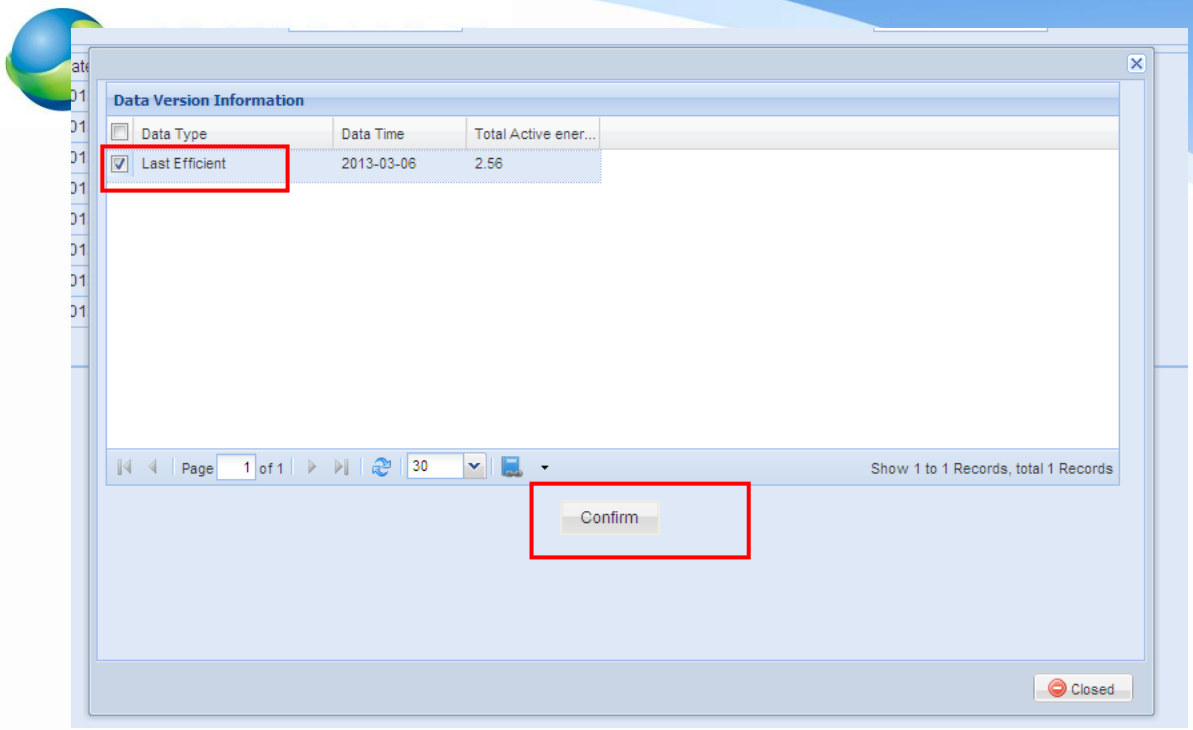


Figure 320 Use the estimation data

d. Save data: select the date that the data need to be saved, click “Save” button to save the data. If it is saved successfully, there will be a prompt message showing “save successfully”.

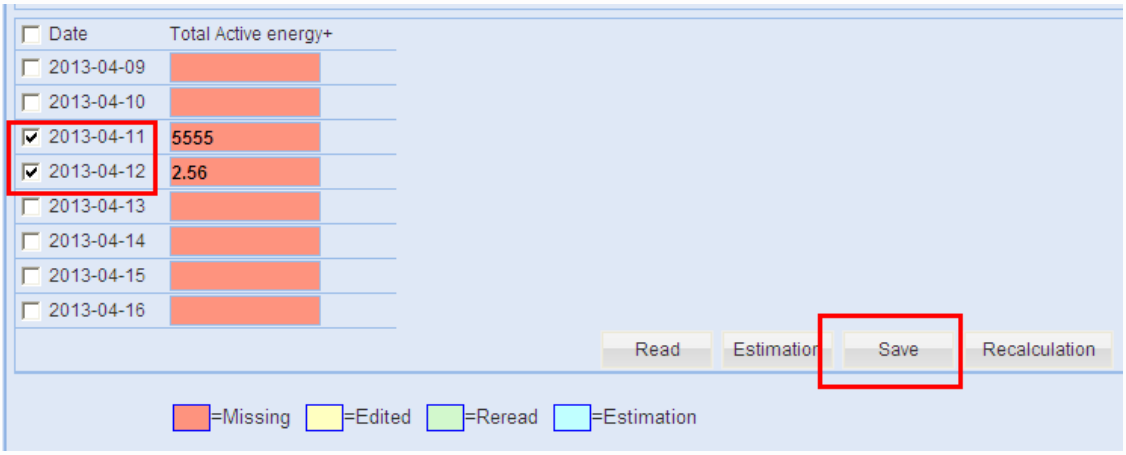


Figure 321 Save data

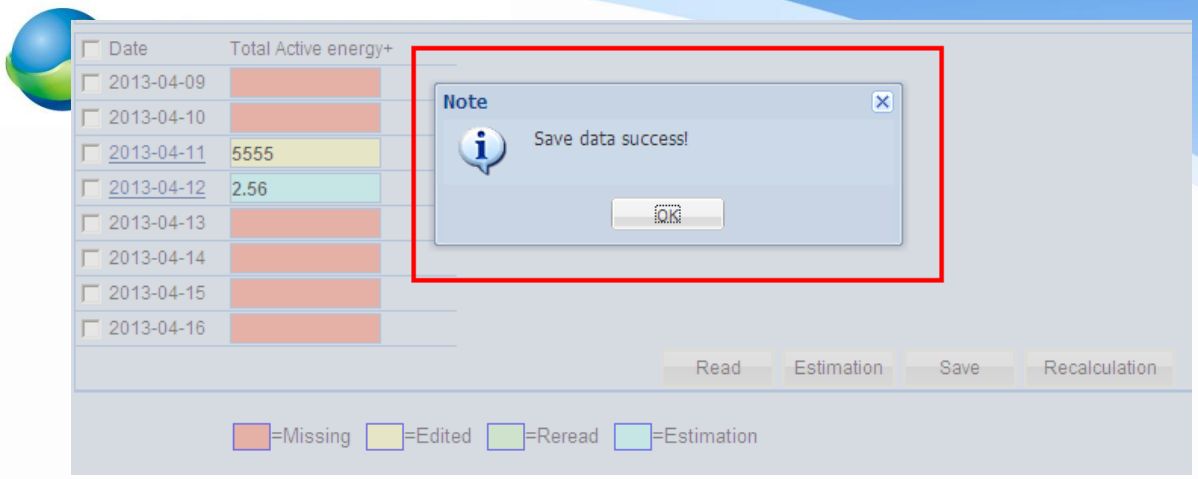


Figure 322 Save successfully

16.4. Monthly Frozen Data Management

[Menu]Advance>Data Version Management>Month Freeze Data Management

[Function] this is for management of monthly frozen data

[Step]

a. Select meter: select meter (that is online) node at the left, the equipment include GPRS meter and data concentrator.

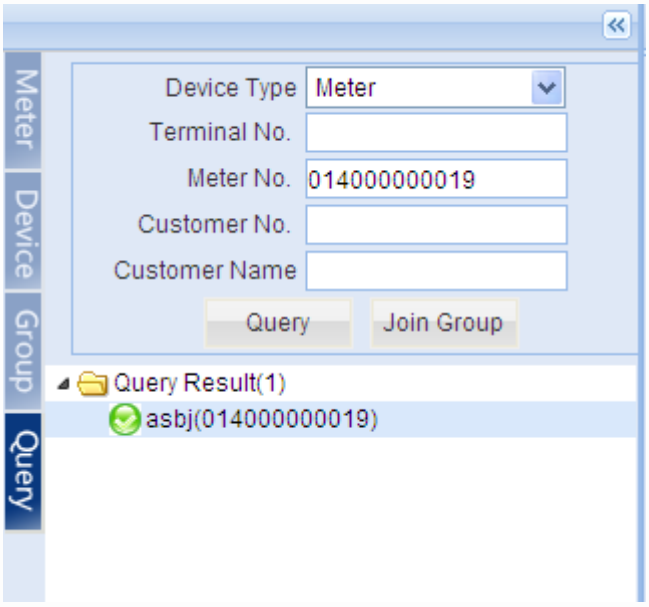


Figure 323 Select meter

b. Check data: select starting date and ending date, and click “Query” button.

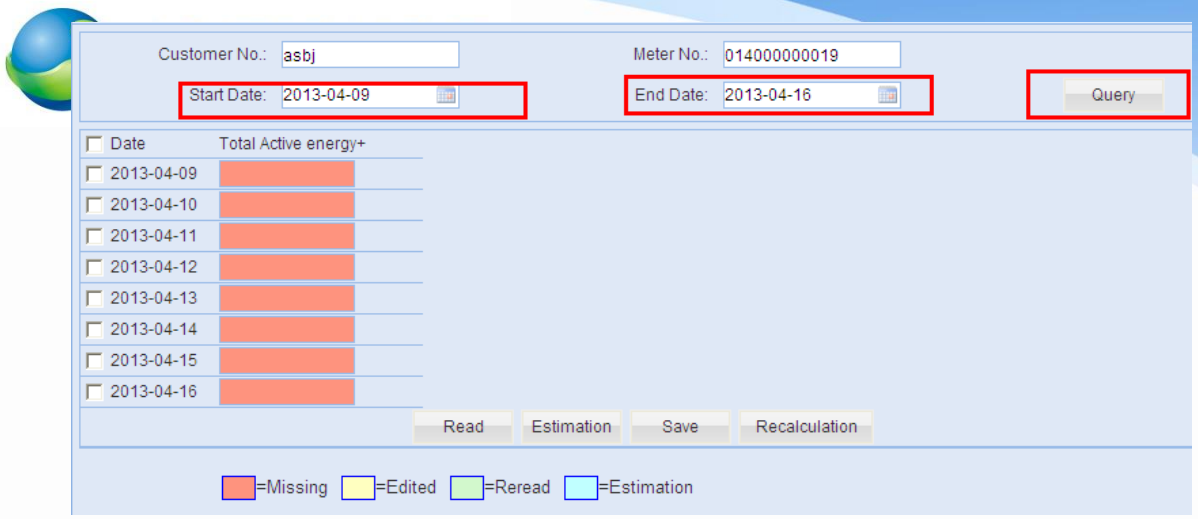


Figure 324 Check data

c. Complete the data

1) Manual editing: select the relevant date and then key in the data directly in the input box;

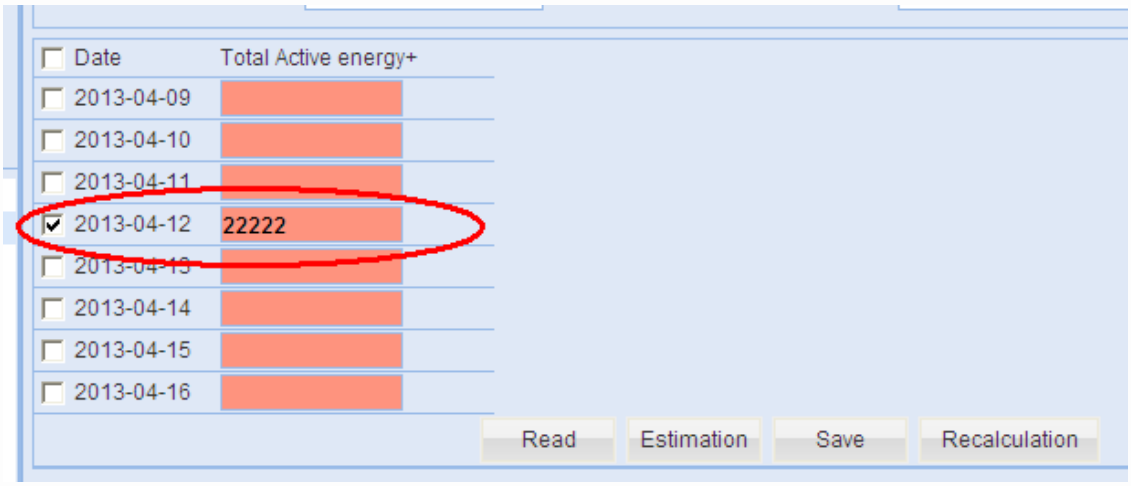


Figure 325 Manual editing

2) Read: select the relevant date that data need to be re-read, then click “Read” button to read the data.

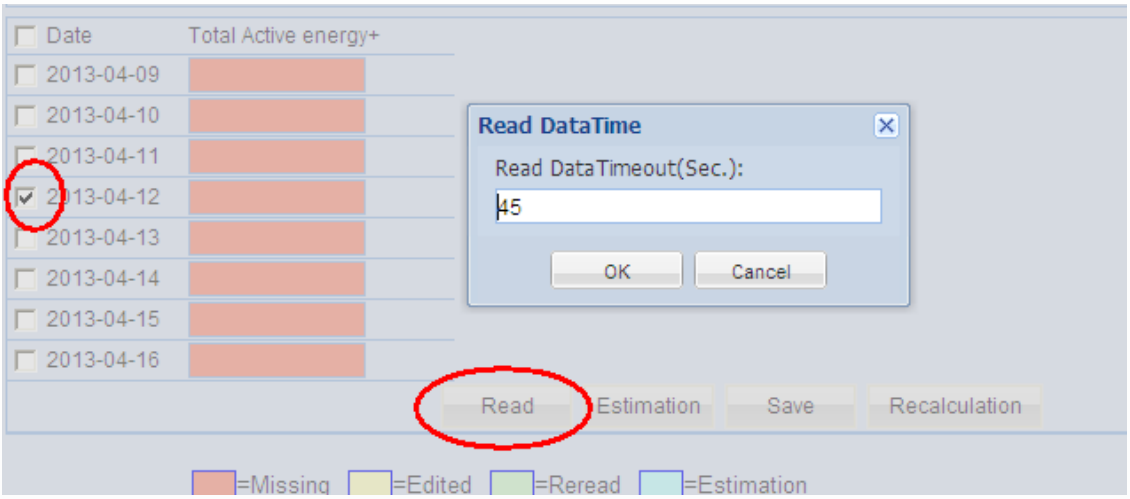


Figure 326 Manual re-reading

3) Estimation: select the relevant date that data need to be estimated, click "Estimation" button and there will be a pop-up window showing estimation data. Select the needed estimation data and click "Confirm" button.

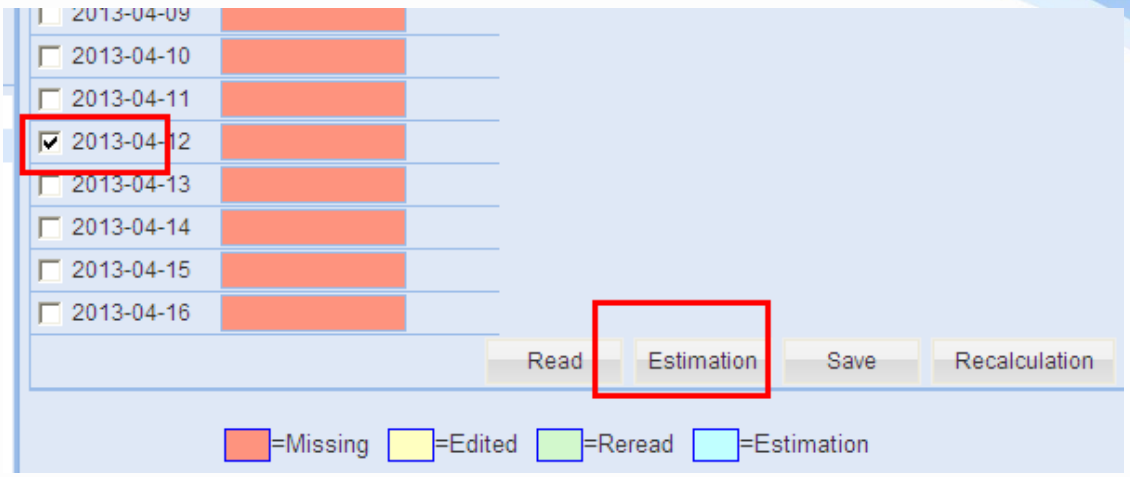


Figure 327 Estimation

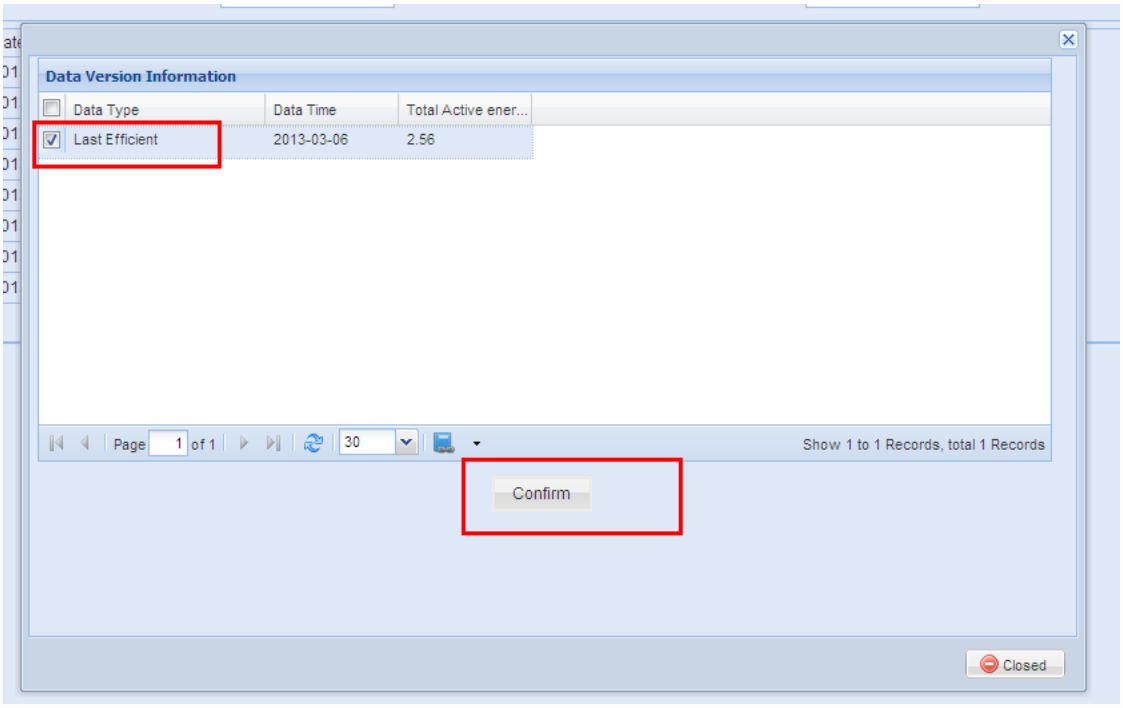


Figure 328 Use the estimation data

d. Save data: select the date that the data need to be saved, click "Save" button to save the data. If it is saved successfully, there will be a prompt message showing "save successfully".

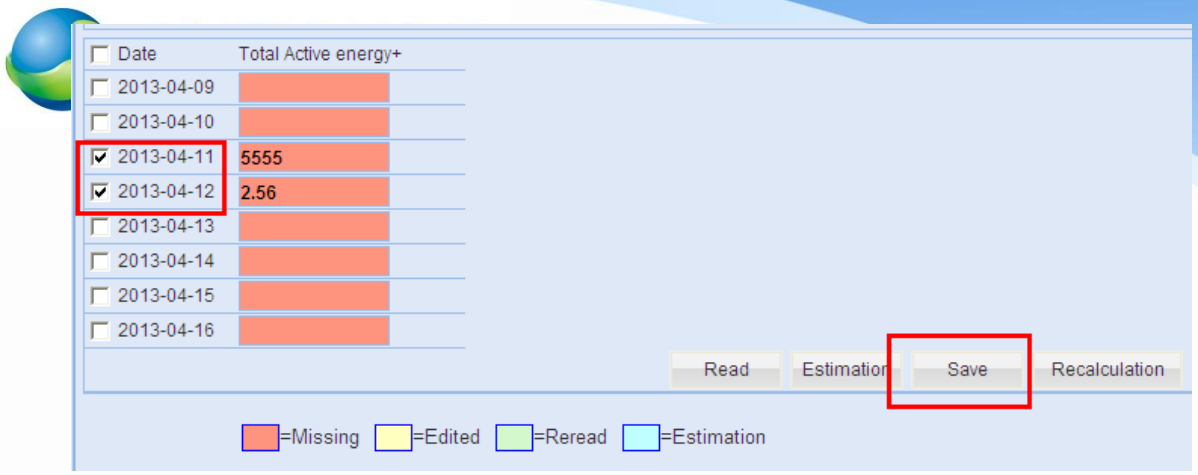


Figure 329 Save data

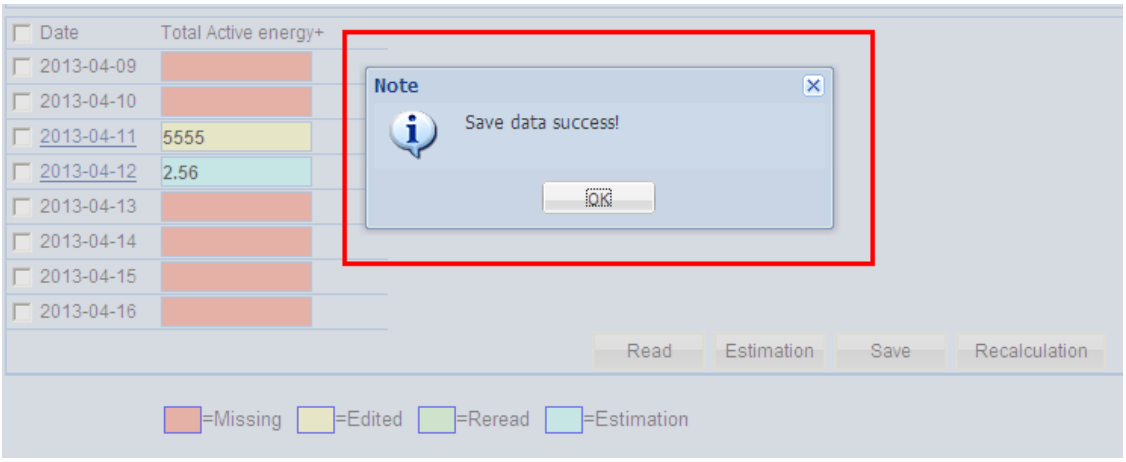


Figure 330 Save successfully

e. Recalculate data: select the date that the data need to be recalculated, click "Recalculation" button to recalculate the data. When the recalculation is completed, there will be a prompt message.

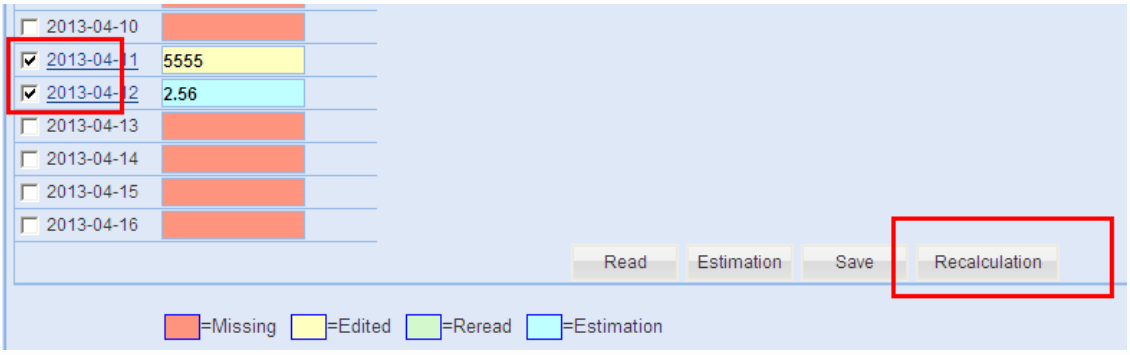


Figure 331 Recalculate data

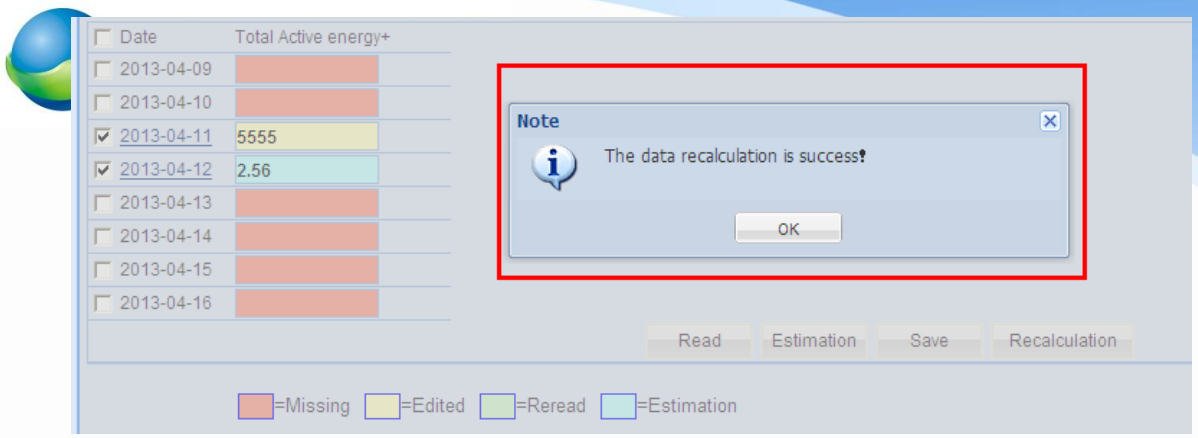


Figure 332 Recalculation complete

17. Plugin Management

17.1. Auto Time Synchronization Strategy Management

[Menu]Diagnostic > Plugin Management > Background Tim Synchronization Strategy

[Function] This is for configuration of auto time synchronization strategy.

[Step]

a. Periodical Time Synchronization Strategy

1) Key in the query conditions “Power Utility” and click “Query” button, the system will make query according to the query conditions and show the result in the list.

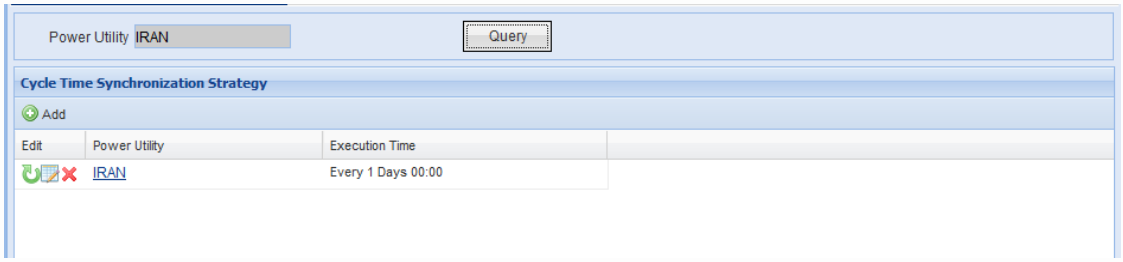


Figure 333 Periodical time synchronization strategy list

2) Click “Add” button to enter periodical time synchronization strategy management interface, key in the required information. The ones marked with “*” are mandatory items.

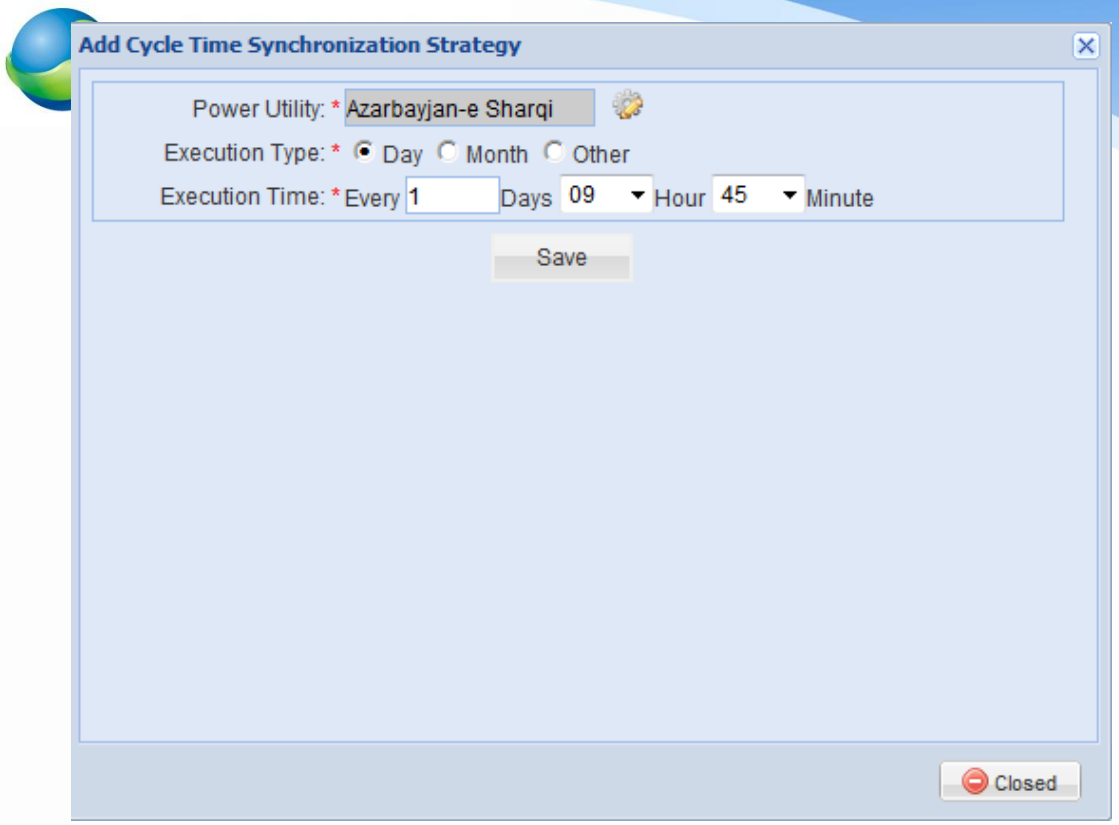

Add Cycle Time Synchronization Strategy
Power Utility: * Azarbayjan-e Sharqi
Execution Type: * Day Month Other
Execution Time: * Every 1 Days 09 Hour 45 Minute
Save
Closed

Figure 334 Add new cycle/periodical time synchronization strategy

Click “save” button, the system will indicate that “are you sure to add periodical time synchronization strategy”. Click “OK” to confirm.

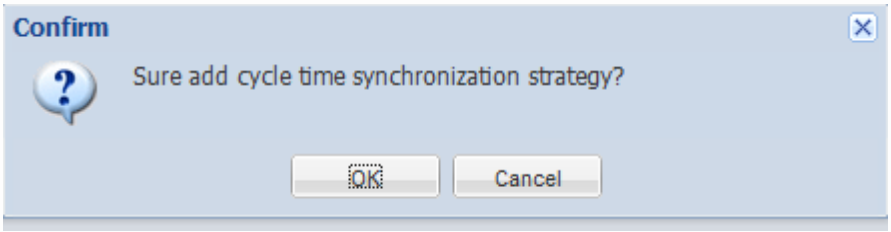


Figure 335 Confirm the adding of periodical time synchronization strategy

If it is saved successfully, there will be a prompt message showing “save successfully”. Otherwise, there will be a failure message.

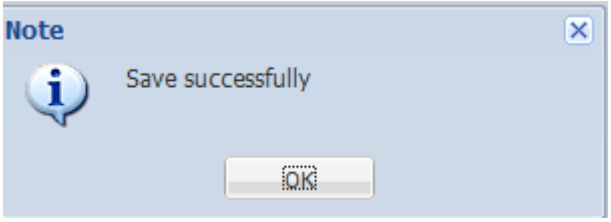


Figure 336 Save successfully

3) Modify periodical time synchronization strategy

Select the Power Utility, click “Edit” button to enter the interface for modifying periodical time synchronization strategy. Key in the information that needs to be modified.

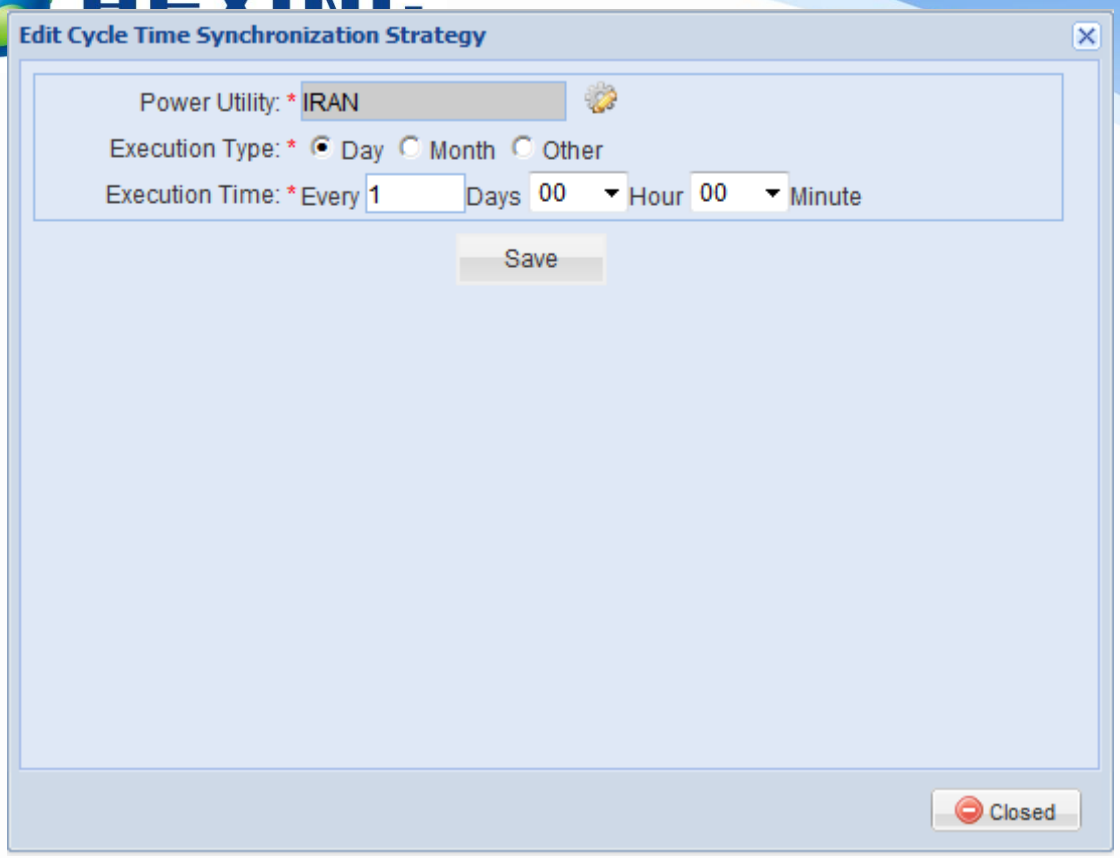

Edit Cycle Time Synchronization Strategy
Power Utility: * IRAN
Execution Type: * Day Month Other
Execution Time: * Every 1 Days 00 Hour 00 Minute
Save
Closed

Figure 337 Modify Periodical Time Synchronization Strategy

Click “save” button, the system will indicate that “are you sure to modify periodical time synchronization strategy”. Click “OK” to confirm.

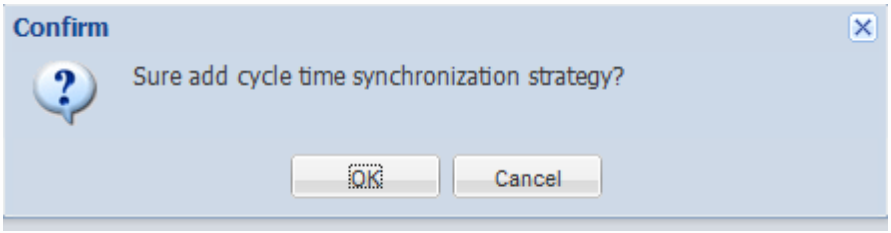


Figure 338 Confirm the modification of periodical time synchronization strategy

If it is saved successfully, there will be a prompt message showing “save successfully”. Otherwise, there will be a failure message.

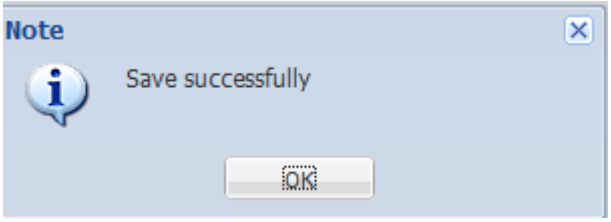


Figure 339 Save successfully

4) Delete periodical time synchronization strategy

Select the strategy that needs to be deleted, click “Delete” button, then there will be a prompt message indicating “are you sure to delete the periodical time synchronization

strategy”. Click “ok” to confirm.

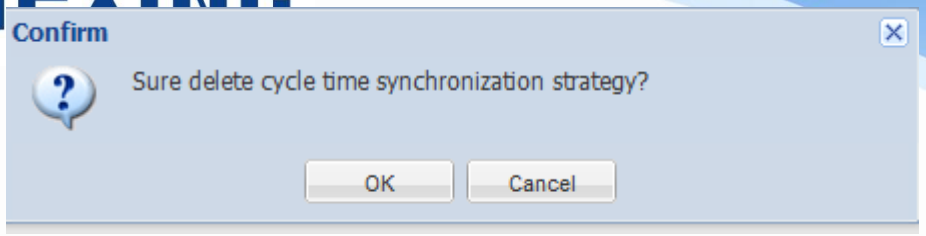


Figure 340 Confirm to delete the periodical time synchronization strategy

If it is deleted successfully, there will be a prompt message showing “delete successfully”. Otherwise, there will be a failure message.

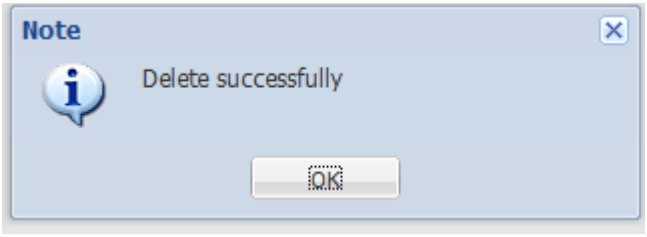


Figure 341 Delete successfully

5) time synchronization strategy reissuance detail

Click “Task Reissue Detail” button to enter the interface for periodical time synchronization strategy reissuance detail.

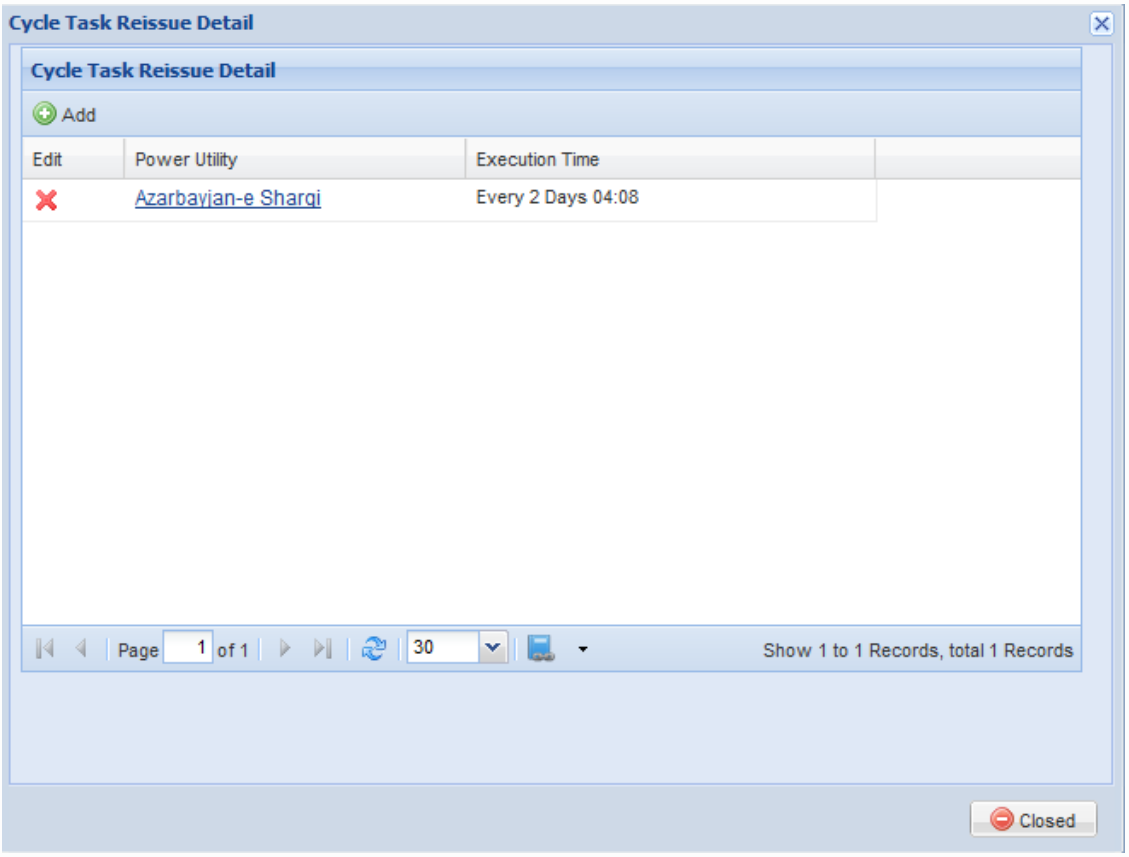


Figure 342 Task Reissuance Detail

6) Click “Add” button to enter the task reissuance detail management interface. Add the task reissuance detailed strategy for the Power Utility. (Note: “Power Utility”

can't be edited.)

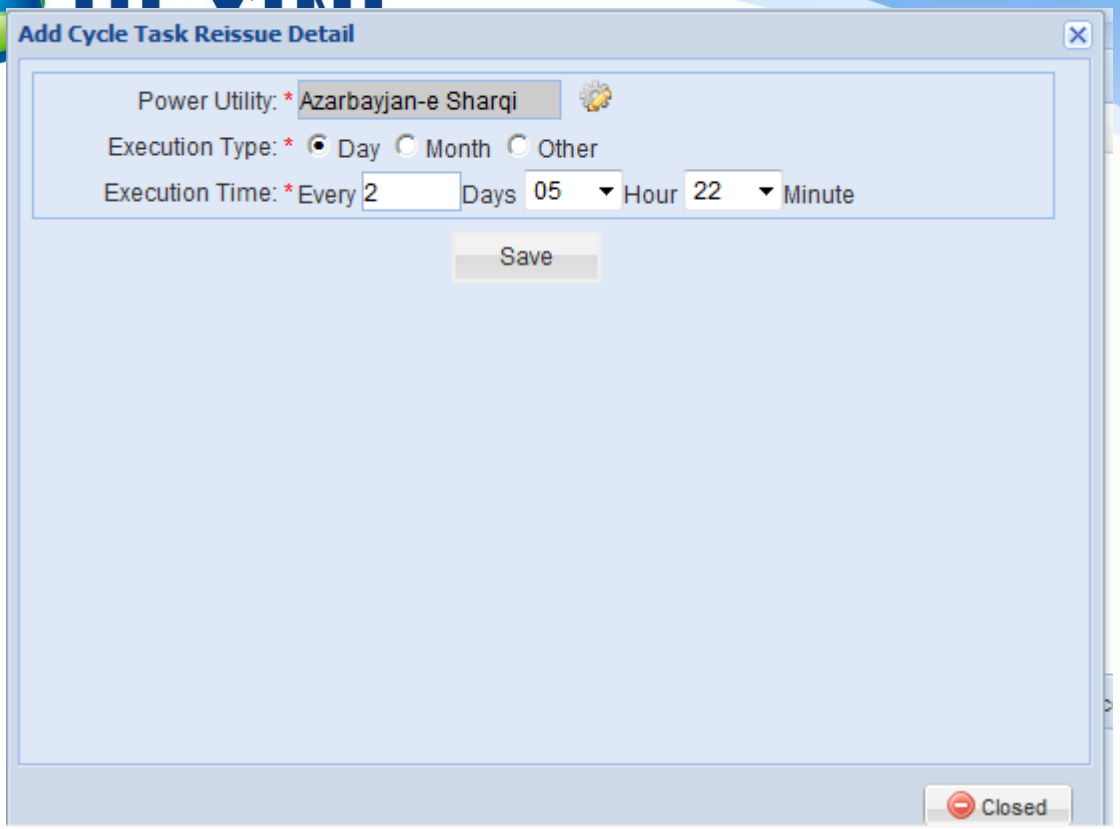

Add Cycle Task Reissue Detail
Power Utility: * Azarbayjan-e Sharqi
Execution Type: * Day Month Other
Execution Time: * Every 2 Days 05 Hour 22 Minute
Save
Closed

Figure 343 Add task reissuance detail management

Click "Save" button then there will be a prompt message indicating "are you sure to add the periodical task reissuance detail". Click "ok" to confirm.

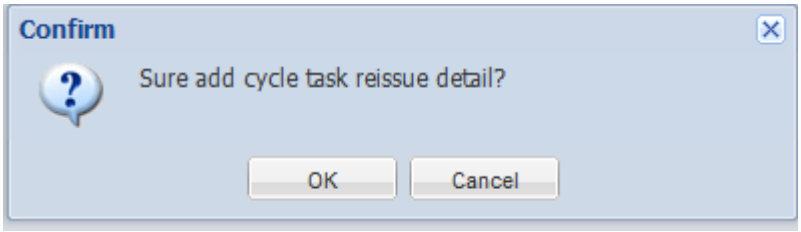


Figure 344 Confirm to add periodical task reissuance detail

If it is saved successfully, there will be a prompt message showing "save successfully". Otherwise, there will be a failure message.

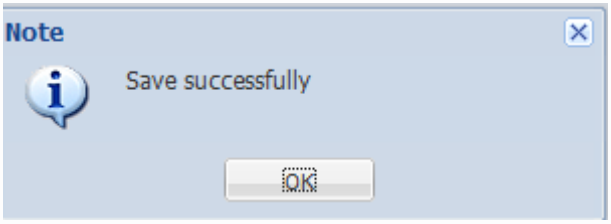


Figure 345 Save successfully

7) Delete task reissuance detail

Select the strategy that needs to be deleted, click "Delete" button and there will be a prompt message indicating "are you sure to delete periodical task reissuance detail?", click "OK" to confirm.

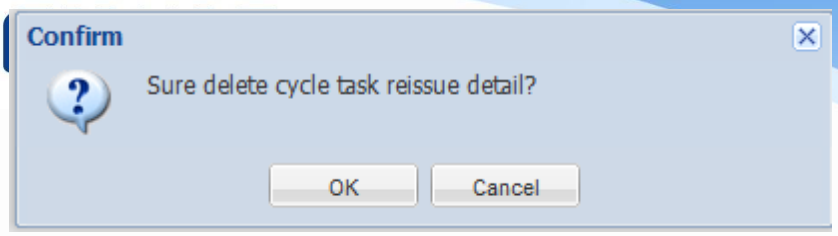


Figure 346 Confirm to delete periodical task reissuance detail

If it is deleted successfully, there will be a prompt message showing "delete successfully". Otherwise, there will be a failure message.

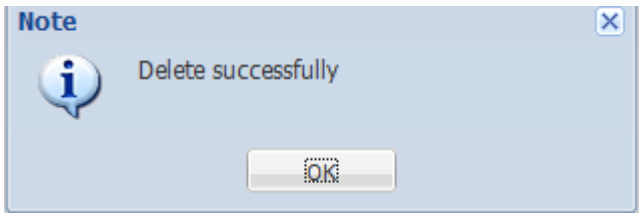


Figure 347 Delete successfully

b. Temporary time synchronization strategy

1) Key in the query conditions "Power Utility" and "Execution State", click "Query" button, the system will make query according to the query conditions and show the result in the list.

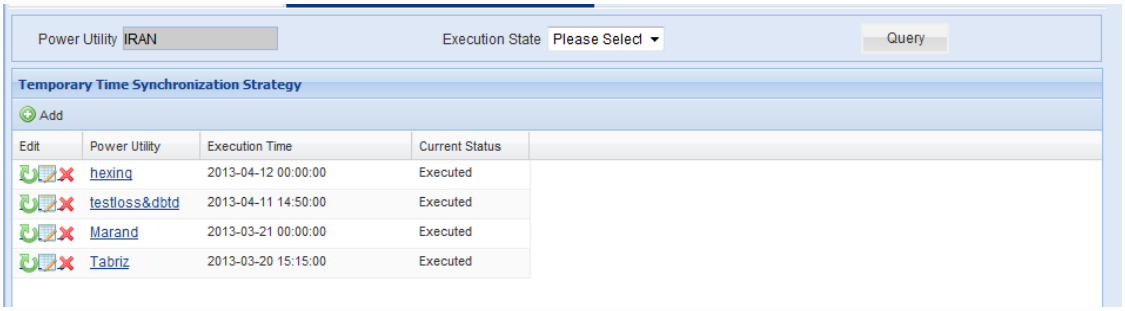


Figure 348 Temporary time synchronization strategy list

2) Click "Add" button to enter temporary time synchronization strategy management interface, key in the required information. The ones marked with "*" are mandatory items.

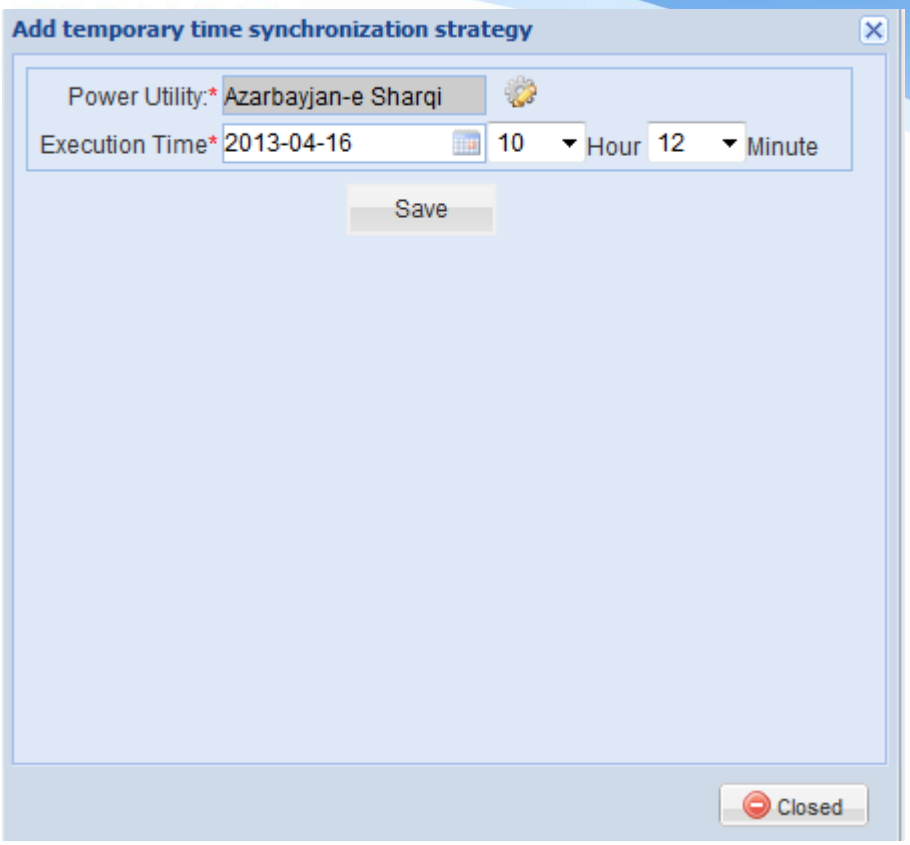


Figure 349 Add temporary time synchronization strategy

Click “save” button, the system will indicate that “are you sure to add temporary time synchronization strategy”? Click “OK” to confirm.

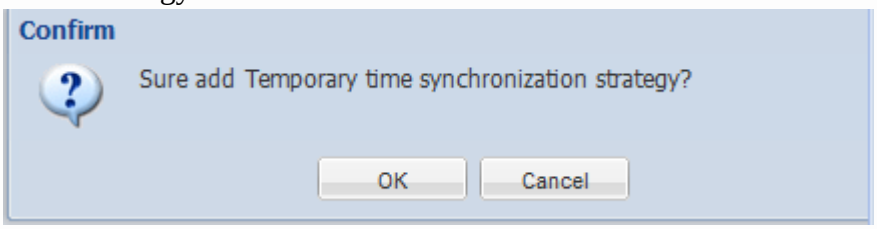


Figure 350 Prompt message

If it is saved successfully, there will be a prompt message showing “save successfully”. Otherwise, there will be a failure message.

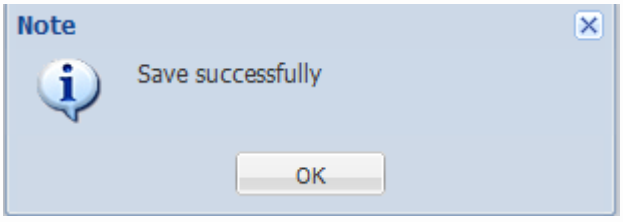


Figure 351 Save successfully

3) Modify temporary time synchronization strategy

Select the strategy that needs to be modified, click “edit” button to enter the interface for modifying temporary time synchronization strategy. (Note: “Power Utility” can’t be edited.)

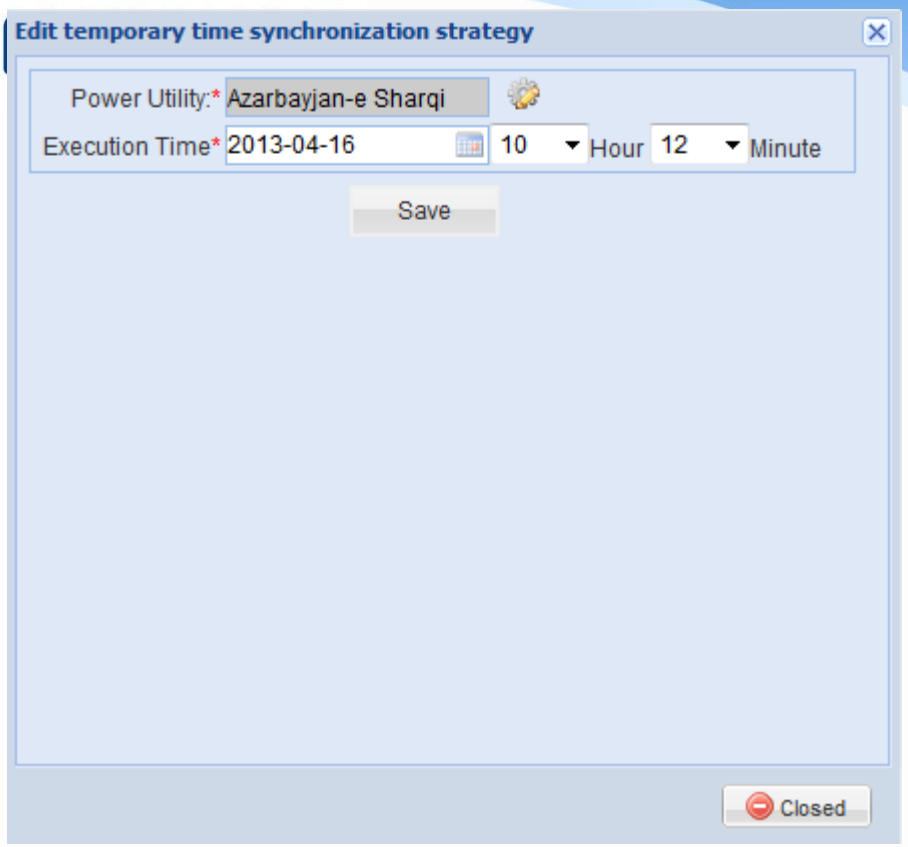


Figure 352 Modify Temporary Time Synchronization Strategy

Click "save" button, the system will indicate that "are you sure to modify temporary time synchronization strategy". Click "OK" to confirm.

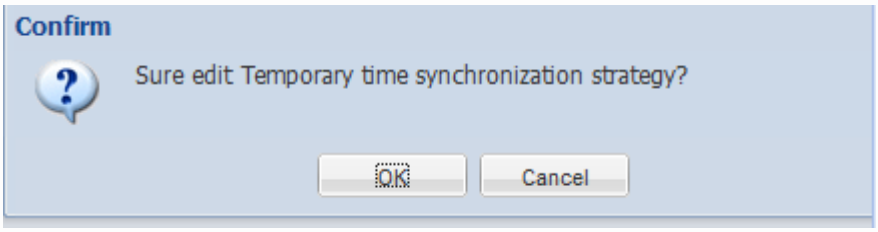


Figure 353 Prompt message

If it is saved successfully, there will be a prompt message showing "save successfully". Otherwise, there will be a failure message.

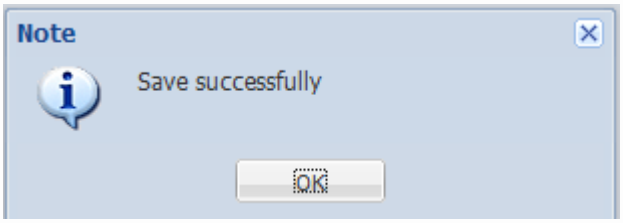


Figure 354 Save successfully

4) Delete temporary time synchronization strategy

Select the strategy that needs to be deleted, click "Delete" button, then there will be a prompt message indicating "are you sure to delete the temporary time synchronization strategy". Click "ok" to confirm.

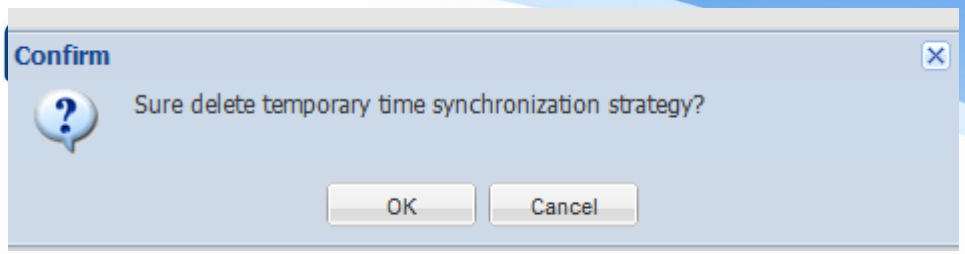


Figure 355 Prompt message

If it is deleted successfully, there will be a prompt message showing “delete successfully”. Otherwise, there will be a failure message.

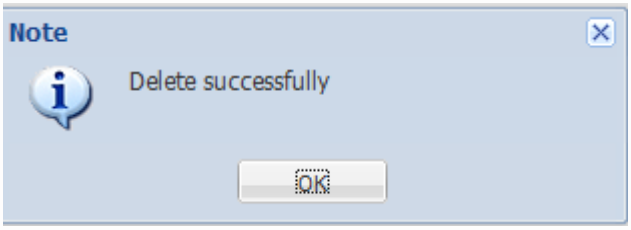


Figure 356 Delete successfully

5) temporary task reissuance detail

Select one strategy and click “Task Reissue Detail” button to enter temporary time synchronization strategy management interface.

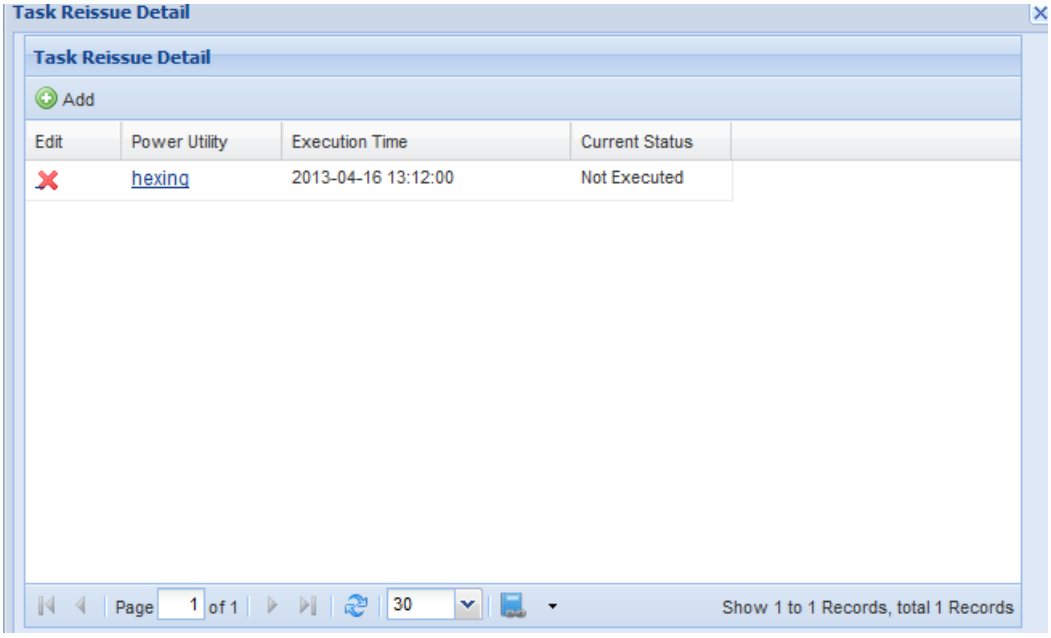


Figure 357 Temporary task detailed strategy list

6) Click “Add” button to enter temporary task reissuance detail strategy management interface, key in the required information. The ones marked with “*” are mandatory items. (Note: “Power Utility” can’t be edited.)

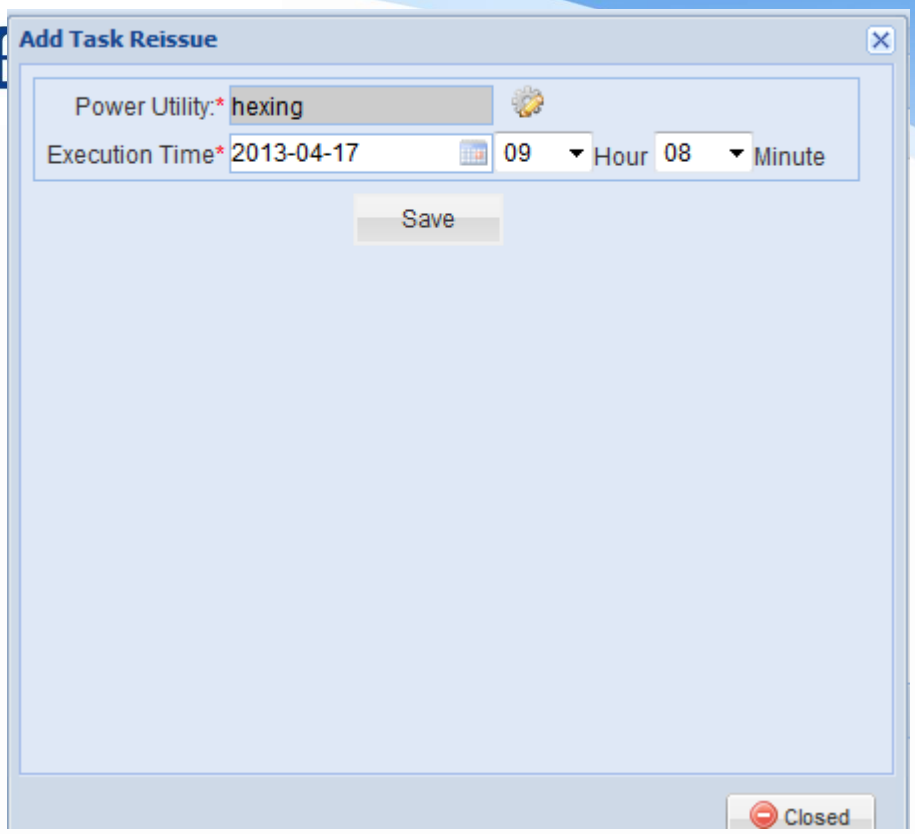


Figure 358 Add temporary task detailed strategy

Click “save” button, the system will indicate that “are you sure to add task reissuance?” Click “OK” to confirm.

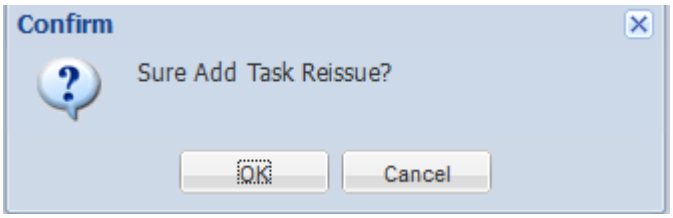


Figure 359 Prompt message

If it is saved successfully, there will be a prompt message showing “save successfully”. Otherwise, there will be a failure message.

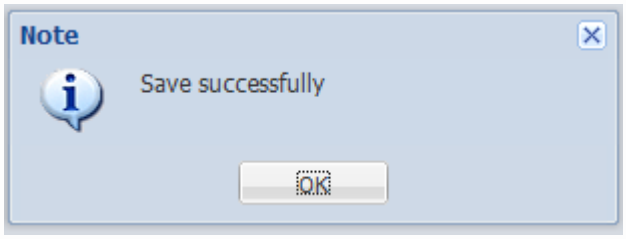


Figure 360 Save successfully

8) Delete task reissuance temporary time synchronization strategy

Select the strategy that needs to be deleted, click “Delete” button and there will be a prompt message indicating “are you sure to delete task reissuance”. Click “OK” to confirm.

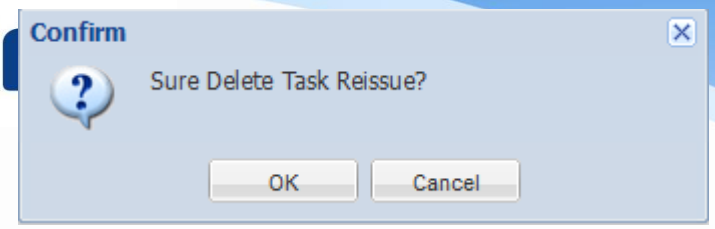


Figure 361 Prompt message

If it is deleted successfully, there will be a prompt message showing "delete successfully". Otherwise, there will be a failure message.

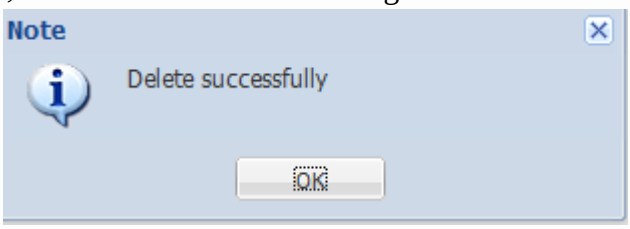


Figure 362 Delete successfully

17.2. Rereading Plugin Strategy Management

[Menu] Diagnostic > Plugin Management > Rereading Plugin Strategy Management

[Function] This is for configuring missing data re-reading strategy for tasks.

[Step]

a. Missing data re-reading strategy

1) Key in the query conditions "Customer Type, Tasks Type, Protocol Type" and click "Query" button, the system will make query according to the query conditions and show the result in the list.

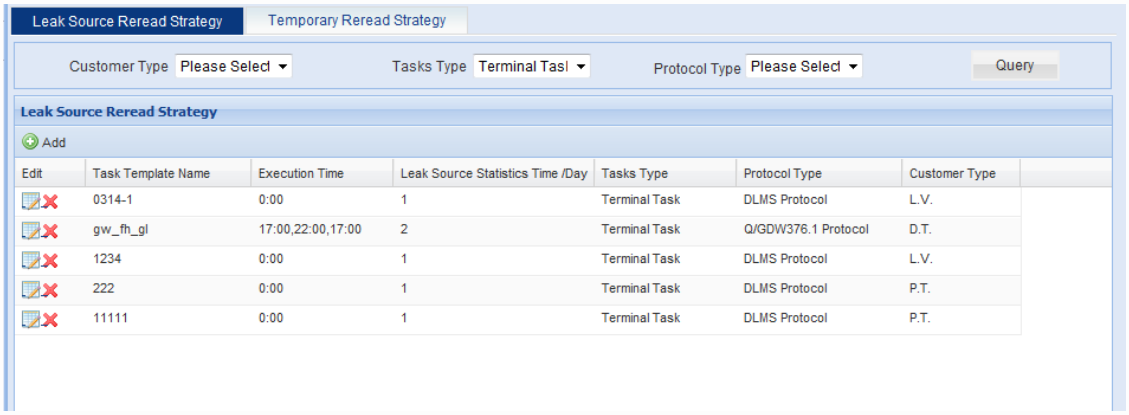

Leak Source Reread Strategy
Temporary Reread Strategy
Customer Type Please Select
Tasks Type Terminal Tasl
Protocol Type Please Select
Query
Leak Source Reread Strategy
Add
Edit
Task Template Name
Execution Time
Leak Source Statistics Time /Day
Tasks Type
Protocol Type
Customer Type
0314-1 0:00 1 Terminal Task DLMS Protocol L.V.
gw_fh_gl 17:00,22:00,17:00 2 Terminal Task Q/GDW376.1 Protocol D.T.
1234 0:00 1 Terminal Task DLMS Protocol L.V.
222 0:00 1 Terminal Task DLMS Protocol P.T.
11111 0:00 1 Terminal Task DLMS Protocol P.T.

Figure 363 Missing data re-reading strategy list

2) Add missing data re-reading strategy

Click "Add" button to enter missing data re-reading strategy management interface, key in the required information. The ones marked with "*" are

mandatory items.

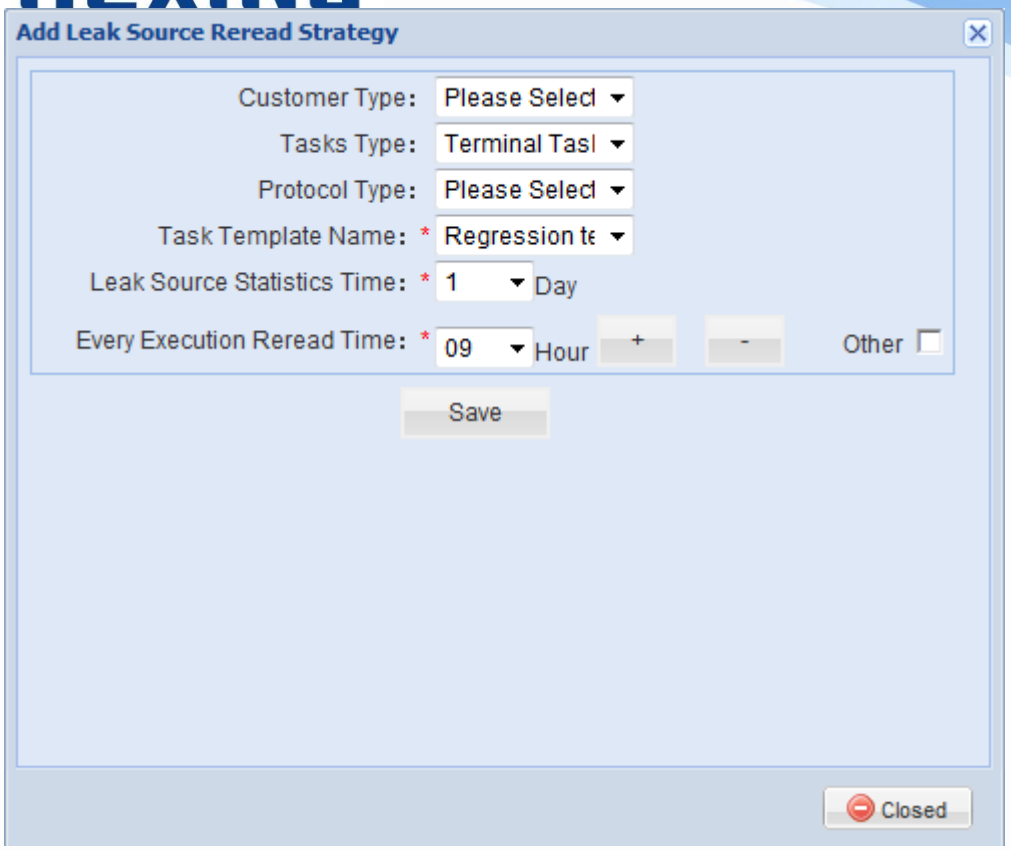


Figure 364 Add missing data re-reading strategy

Click “save” button, the system will indicate that “are you sure to add missing data re-reading strategy”? Click “OK” to confirm.

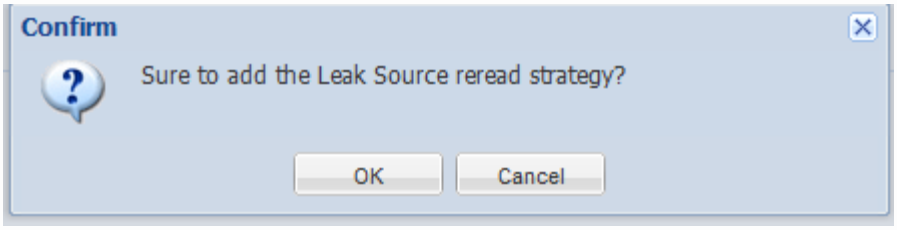


Figure 365 Prompt message

If it is saved successfully, there will be a prompt message showing “save successfully”. Otherwise, there will be a failure message.

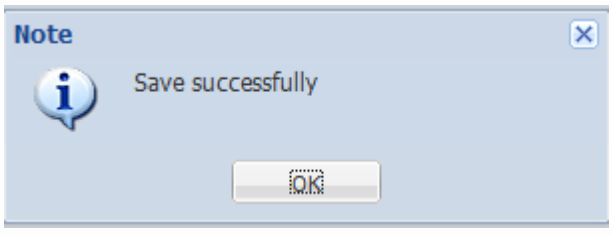


Figure 366 Save successfully

3) Edit missing data re-reading strategy

Select the task template strategy that needs to be modified, click “edit” button

to enter the interface for missing data re-reading strategy management and key in the items that need to be modified.

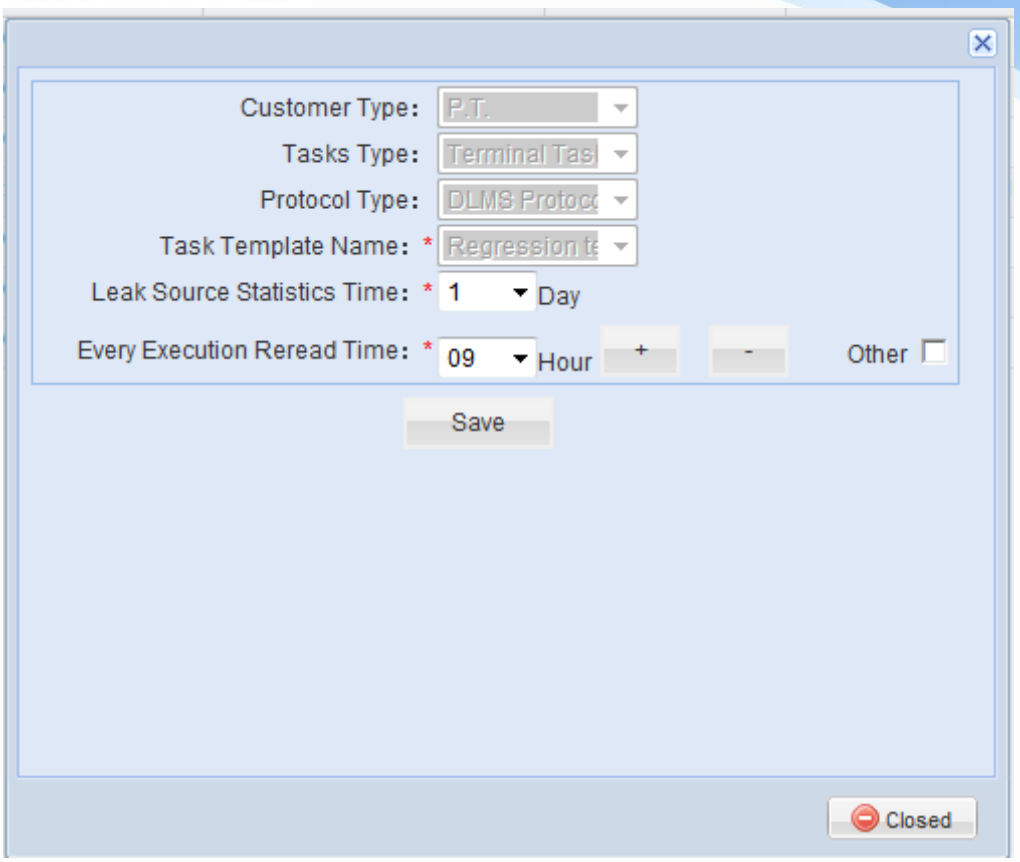

Customer Type: P.T.
Tasks Type: Terminal Tas
Protocol Type: DLMS Protoc
Task Template Name: * Regression te
Leak Source Statistics Time: * 1 Day
Every Execution Reread Time: * 09 Hour + - Other
Save
Closed

Figure 367 Edit missing data re-reading strategy management

Click “save” button, the system will indicate that “are you sure to edit missing data re-reading strategy”? Click “OK” to confirm.

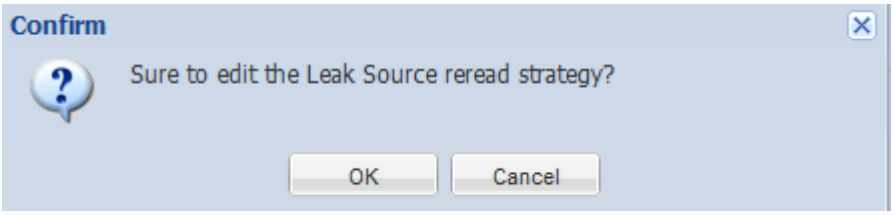


Figure 368 Prompt message

If it is saved successfully, there will be a prompt message showing “save successfully”. Otherwise, there will be a failure message.

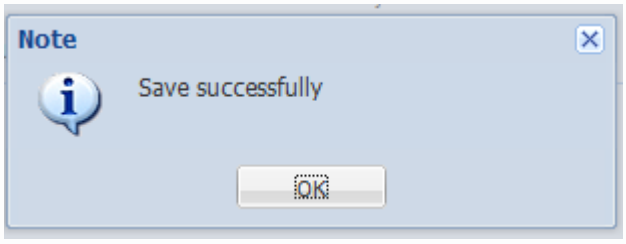


Figure 369 Save successfully

4) Delete missing data re-reading strategy

Select the task template strategy at needs to be deleted, click “delete” button and the system will indicate that “are you sure to delete missing data

re-reading strategy”? Click “OK” to confirm.

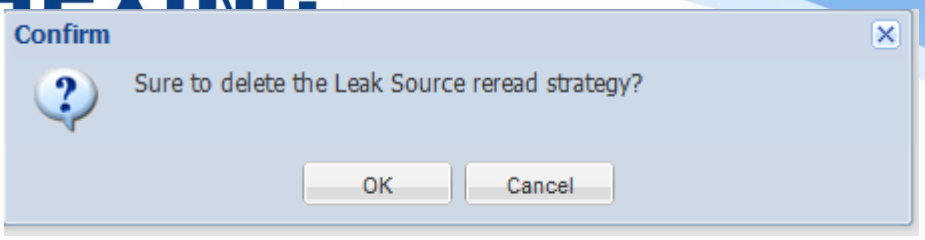


Figure 370 Prompt message

If it is deleted successfully, there will be a prompt message showing “delete successfully”. Otherwise, there will be a failure message.

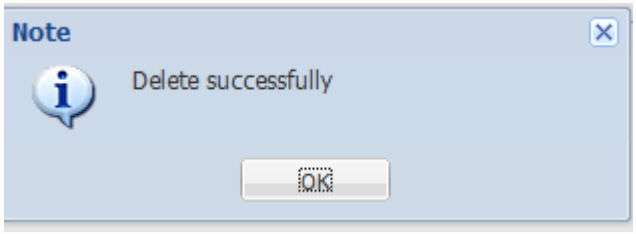


Figure 371 Delete successfully

b. Temporary re-reading strategy

1) Key in the query conditions “Power Utility, Customer Type, Tasks Type, Protocol Type, Execution State” and click “Query” button, the system will make query according to the query conditions and show the result in the list.

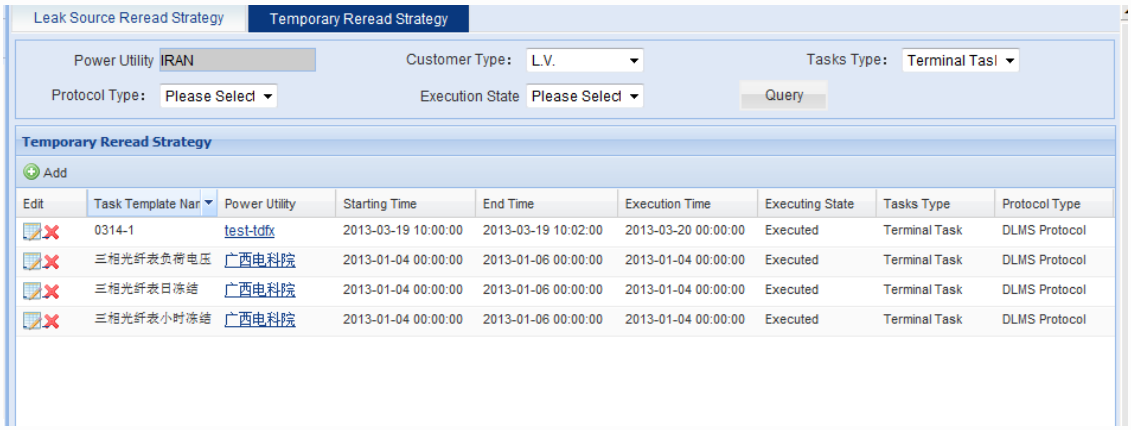

Leak Source Reread Strategy
Temporary Reread Strategy
Power Utility IRAN
Customer Type: L.V.
Tasks Type: Terminal Tasl
Protocol Type: Please Select
Execution State Please Select
Query
Temporary Reread Strategy
Add
Edit
Task Template Nar
Power Utility
Starting Time
End Time
Execution Time
Executing State
Tasks Type
Protocol Type
0314-1 test-tdfx 2013-03-19 10:00:00 2013-03-19 10:02:00 2013-03-20 00:00:00 Executed Terminal Task DLMS Protocol
三相光纤表负荷电压 广西电科院 2013-01-04 00:00:00 2013-01-06 00:00:00 2013-01-04 00:00:00 Executed Terminal Task DLMS Protocol
三相光纤表日冻结 广西电科院 2013-01-04 00:00:00 2013-01-06 00:00:00 2013-01-04 00:00:00 Executed Terminal Task DLMS Protocol
三相光纤表小时冻结 广西电科院 2013-01-04 00:00:00 2013-01-06 00:00:00 2013-01-04 00:00:00 Executed Terminal Task DLMS Protocol

Figure 372 Temporary Re-reading Strategy List

2) Add temporary re-reading strategy

Click “Add” button to enter add temporary re-reading strategy management interface, key in the required information. The ones marked with “*” are mandatory items.

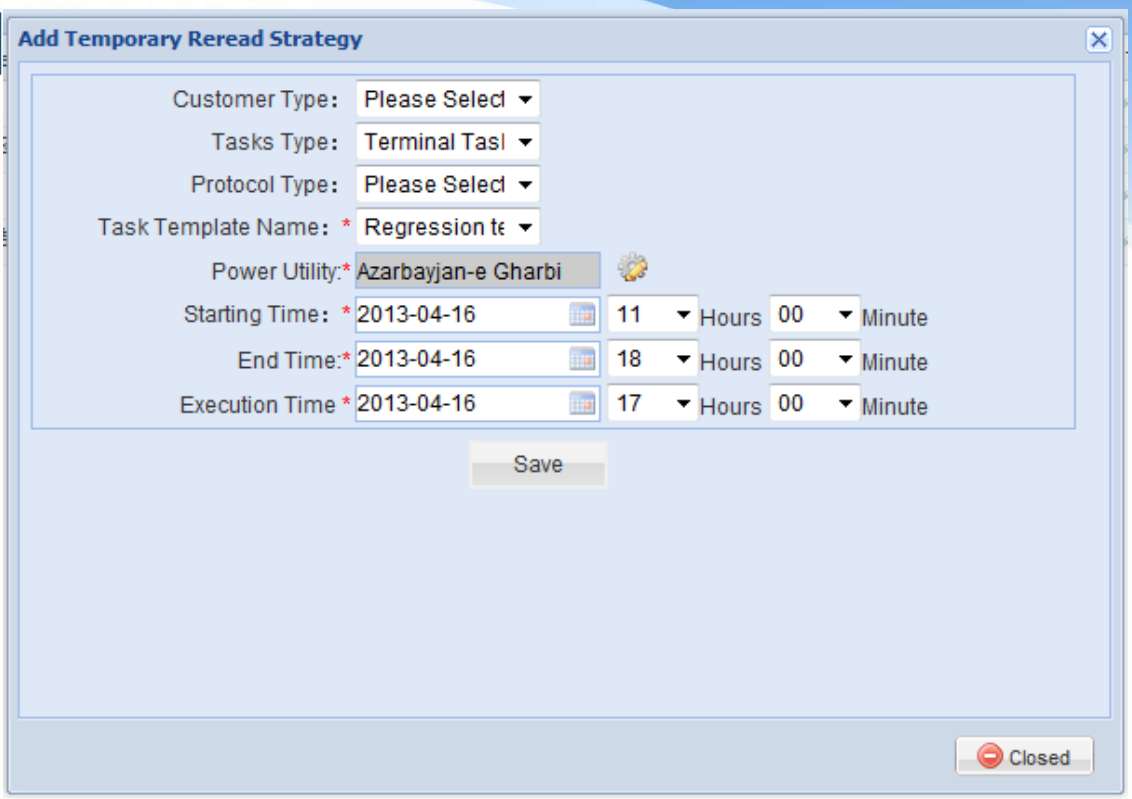
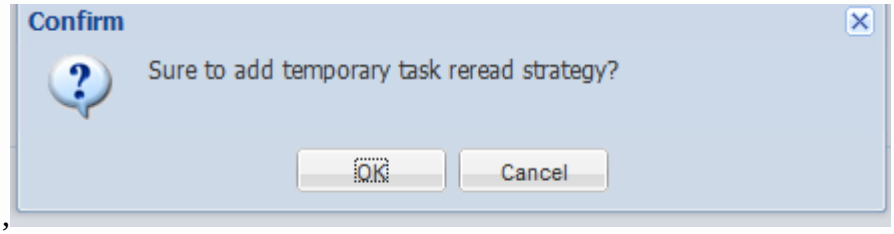

Add Temporary Reread Strategy
Customer Type: Please Select
Tasks Type: Terminal Task
Protocol Type: Please Select
Task Template Name: * Regression te
Power Utility:* Azarbayjan-e Gharbi
Starting Time: * 2013-04-16 11 Hours 00 Minute
End Time:* 2013-04-16 18 Hours 00 Minute
Execution Time * 2013-04-16 17 Hours 00 Minute
Save
Closed

Figure 373 Add temporary re-reading strategy

Click “save” button, the system will indicate that “are you sure to add temporary re-reading strategy”? Click “OK” to confirm.



,

Figure 374 Prompt message

If it is saved successfully, there will be a prompt message showing “save successfully”. Otherwise, there will be a failure message.

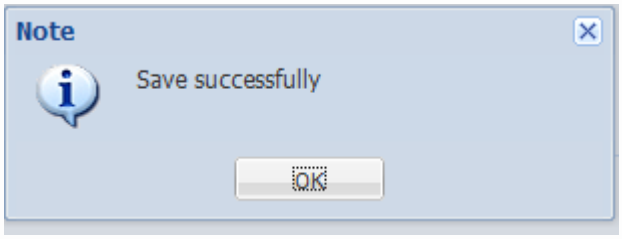


Figure 375 Save successfully

3) Edit temporary re-reading strategy

Select the task template that needs to be modified, click “edit” button to enter the interface for edit temporary re-reading strategy management and key in the items that need to be modified.

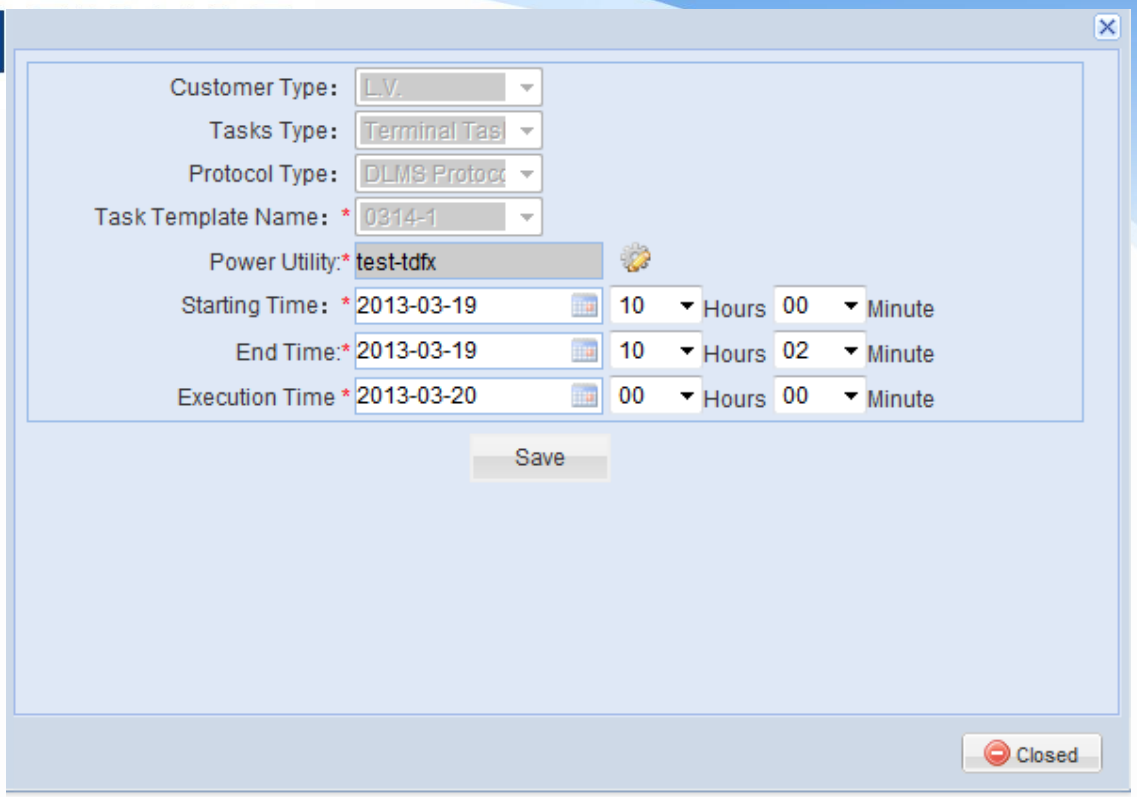


Figure 376 Edit Temporary Re-reading Strategy Management

Click “save” button, the system will indicate that “are you sure to edit temporary re-reading strategy”? Click “OK” to confirm.

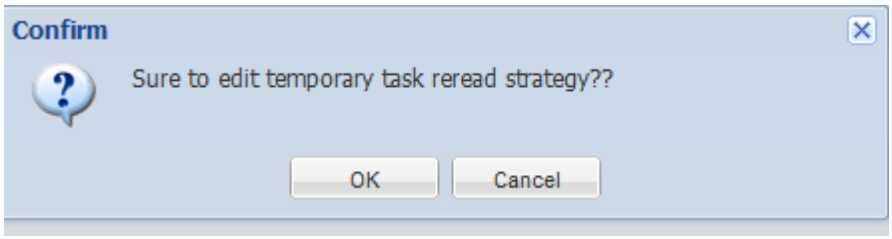


Figure 377 Prompt message

If it is saved successfully, there will be a prompt message showing “save successfully”. Otherwise, there will be a failure message.

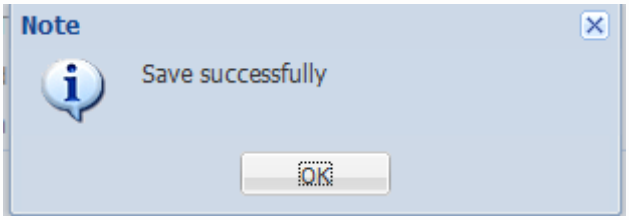


Figure 378 Save successfully

4) Delete temporary re-reading strategy

Select the task template temporary strategy that needs to be deleted, click “Delete” button and there will be a prompt message indicating “are you sure to delete temporary re-reading strategy ?”, click “OK” to confirm.

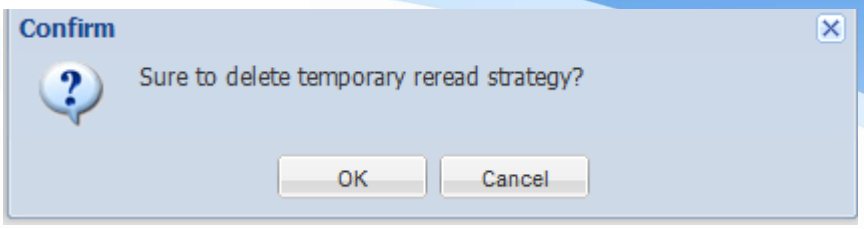


Figure 379 Prompt message

If it is deleted successfully, there will be a prompt message showing “delete successfully”. Otherwise, there will be a failure message.

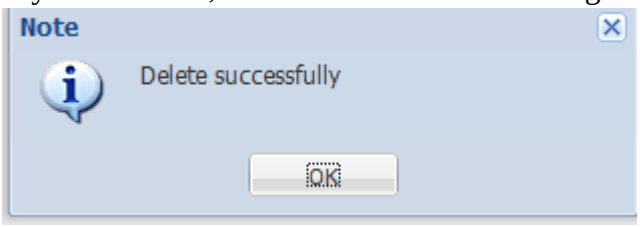


Figure 380 Delete successfully

18. Alarm Processing

18.1. Alarm Query

[Menu] Diagnostic > Alarms > Alarm Query

[Function] This is for checking the meter’s alarm events.

[Step]

Select one meter node (Power Utility, route, transformer area, or transformer) at the left meter tree, and key in “Subscriber Type, Alarm Source, Alarm Level, Protocol Type, Alarm Name, Start Date, End Date”, then click “Query” button. The system will display the alarm event in the alarm event list according to the query conditions. In the list there are below information: Power Utility, Transformer Area Name, Installation Address, Terminal No., Logical Address, Alarm Name, and Alarm Happened Time.

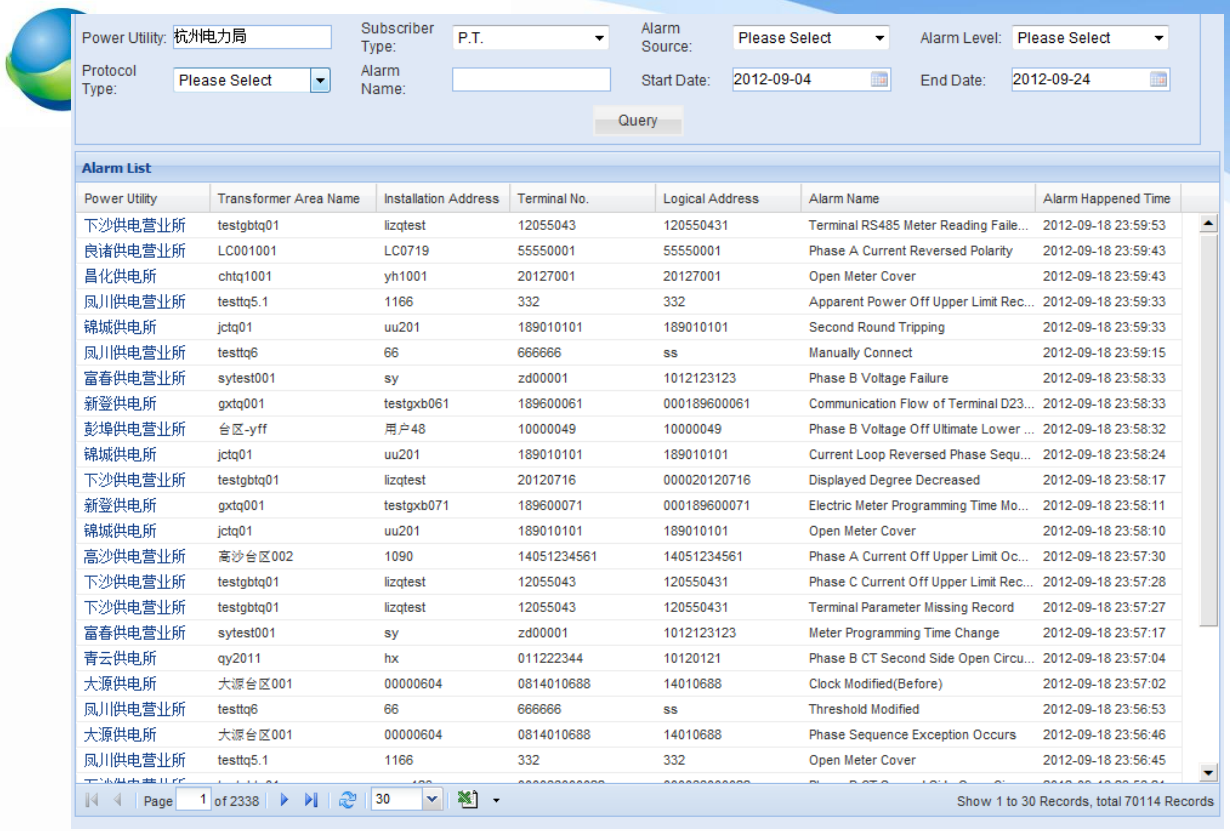

Power Utility: 杭州电力局
Subscriber Type: P.T.
Alarm Source: Please Select
Alarm Level: Please Select
Protocol Type: Please Select
Alarm Name:
Start Date: 2012-09-04
End Date: 2012-09-24
Query
Alarm List
Power Utility | Transformer Area Name | Installation Address | Terminal No. | Logical Address | Alarm Name | Alarm Happened Time
下沙供电营业所 | testgbtq01 | lizqtest | 12055043 | 120550431 | Terminal RS485 Meter Reading Faile... | 2012-09-18 23:59:53
良诸供电营业所 | LC001001 | LC0719 | 55550001 | 55550001 | Phase A Current Reversed Polarity | 2012-09-18 23:59:43
昌化供电所 | chtq1001 | yh1001 | 20127001 | 20127001 | Open Meter Cover | 2012-09-18 23:59:43
凤川供电营业所 | testtq5.1 | 1166 | 332 | 332 | Apparent Power Off Upper Limit Rec... | 2012-09-18 23:59:33
锦城供电所 | jctq01 | uu201 | 189010101 | 189010101 | Second Round Tripping | 2012-09-18 23:59:33
凤川供电营业所 | testtq6 | 66 | 666666 | ss | Manually Connect | 2012-09-18 23:59:15
富春供电营业所 | sytest001 | sy | zd00001 | 1012123123 | Phase B Voltage Failure | 2012-09-18 23:58:33
新登供电所 | gxtq001 | testgxb061 | 189600061 | 000189600061 | Communication Flow of Terminal D23... | 2012-09-18 23:58:33
彭埠供电营业所 | 台区-yff | 用户48 | 10000049 | 10000049 | Phase B Voltage Off Ultimate Lower ... | 2012-09-18 23:58:32
锦城供电所 | jctq01 | uu201 | 189010101 | 189010101 | Current Loop Reversed Phase Sequ... | 2012-09-18 23:58:24
下沙供电营业所 | testgbtq01 | lizqtest | 20120716 | 000020120716 | Displayed Degree Decreased | 2012-09-18 23:58:17
新登供电所 | gxtq001 | testgxb071 | 189600071 | 000189600071 | Electric Meter Programming Time Mo... | 2012-09-18 23:58:11
锦城供电所 | jctq01 | uu201 | 189010101 | 189010101 | Open Meter Cover | 2012-09-18 23:58:10
高沙供电营业所 | 高沙台区002 | 1090 | 14051234561 | 14051234561 | Phase A Current Off Upper Limit Oc... | 2012-09-18 23:57:30
下沙供电营业所 | testgbtq01 | lizqtest | 12055043 | 120550431 | Phase C Current Off Upper Limit Rec... | 2012-09-18 23:57:28
下沙供电营业所 | testgbtq01 | lizqtest | 12055043 | 120550431 | Terminal Parameter Missing Record | 2012-09-18 23:57:27
富春供电营业所 | sytest001 | sy | zd00001 | 1012123123 | Meter Programming Time Change | 2012-09-18 23:57:17
青云供电所 | qy2011 | hx | 011222344 | 10120121 | Phase B CT Second Side Open Circu... | 2012-09-18 23:57:04
大源供电所 | 大源台区001 | 00000604 | 0814010688 | 14010688 | Clock Modified(Before) | 2012-09-18 23:57:02
凤川供电营业所 | testtq6 | 66 | 666666 | ss | Threshold Modified | 2012-09-18 23:56:53
大源供电所 | 大源台区001 | 00000604 | 0814010688 | 14010688 | Phase Sequence Exception Occurs | 2012-09-18 23:56:46
凤川供电营业所 | testtq5.1 | 1166 | 332 | 332 | Open Meter Cover | 2012-09-18 23:56:45
Page 1 of 2338
30
Show 1 to 30 Records, total 70114 Records

Figure 381 Query alarm event

18.2. Alarm Processing

[Menu] Diagnostic > Alarms > Alarm Audit

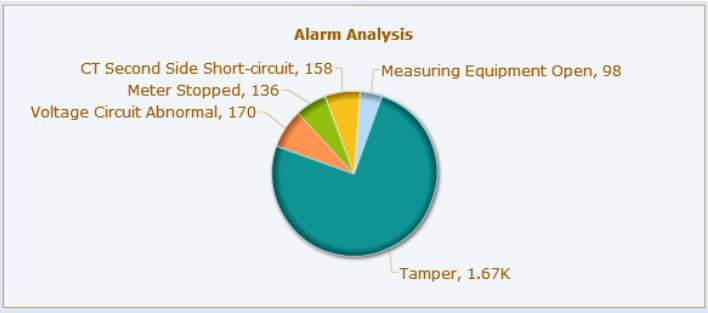
[Function] Alarm processing has two functions, alarm analysis and alarm processing. Alarm analysis will classify the meter alarms and make statistical data. Alarm processing will make closed-loop processing for the meter alarms.

[Step]

a. Alarm analysis

1) Key in the query conditions: Subscriber Type, Protocol Type, Process Status, Start Date, and End Date, and click “Query” button. The system will record the alarm information according to the access level of the Power Utility that the user belongs to. The alarm information will also be shown in pie chart, in which there is the number of each type of alarms for this Power Utility. There will also be a table below the chart, showing the number of different types of alarms of the first-level subordinate unit. If there are more levels of units under the first level subordinate unit, you can check the

alarms of each level accordingly. The information shown in pie chart is associated with that in the table.



Power Utility	Measuring Equipment Open	CT Second Side Short-circuit	Meter Stopped	Voltage Circuit Abnormal	Tamper
浙江杭州电力客户服务中心	64	103	84	104	1038
萧山供电局	1	1	1	1	9
余杭供电局	0	2	3	2	25
桐庐县供电局	2	4	5	7	59
临安市供电局	11	21	16	24	227
富阳市供电局	20	27	27	32	316
Total	98	158	136	170	1674

Figure 382 Statistics of alarm information

2) Click the number of alarm in the table to enter the interface for alarm processing.

3) Click “Export” button to export the alarm statistics to EXCEL file.

b. Alarm processing

1) Select one meter node (Power Utility, route, transformer area, or transformer) at the left meter tree, and key in “Subscriber Type, Protocol Type, Start Date, End Date, Audit Status, Subscriber No., Terminal No., Recovery or Not, and Alarm Type”, then click “Query” button. The system will display the alarm event in the alarm event list according to the query conditions.

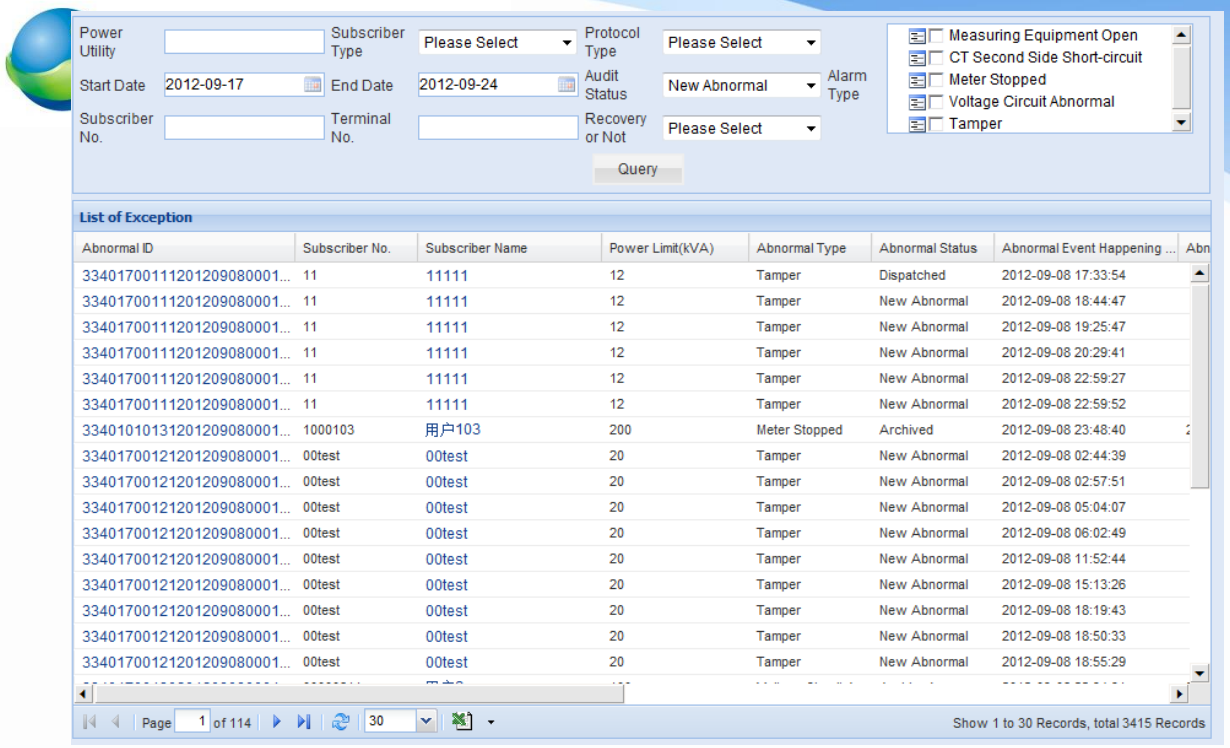


Figure 383 Query meter alarm information

2) Click the "abnormal ID" of one alarm to enter the Alarm Processing interface. Fill in the handling suggestions and click "Dispatcher", "Misinformation", or "Archiving" button according to the actual condition to finish the alarm processing.

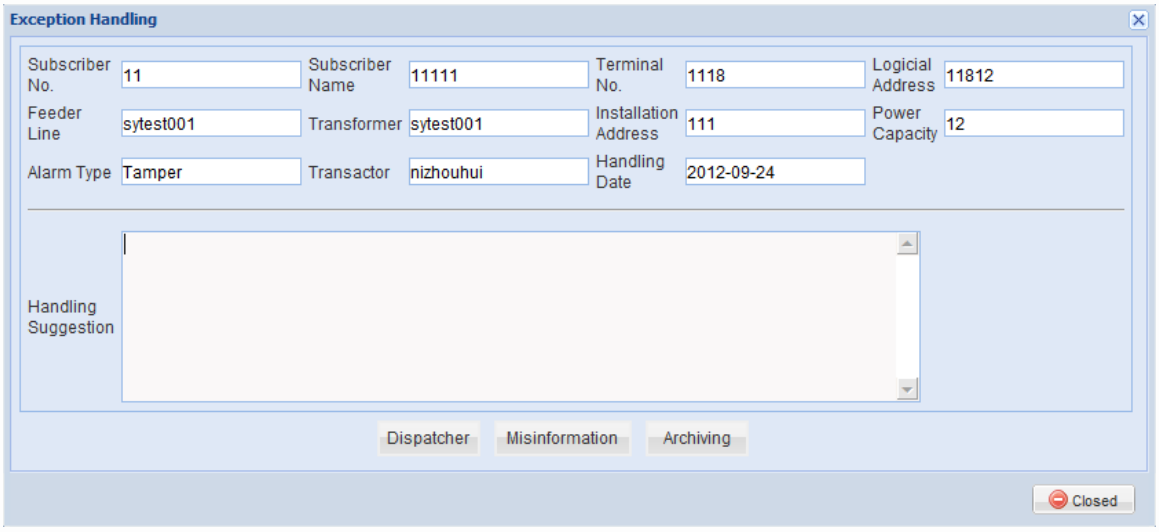


Figure 384 Alarm processing

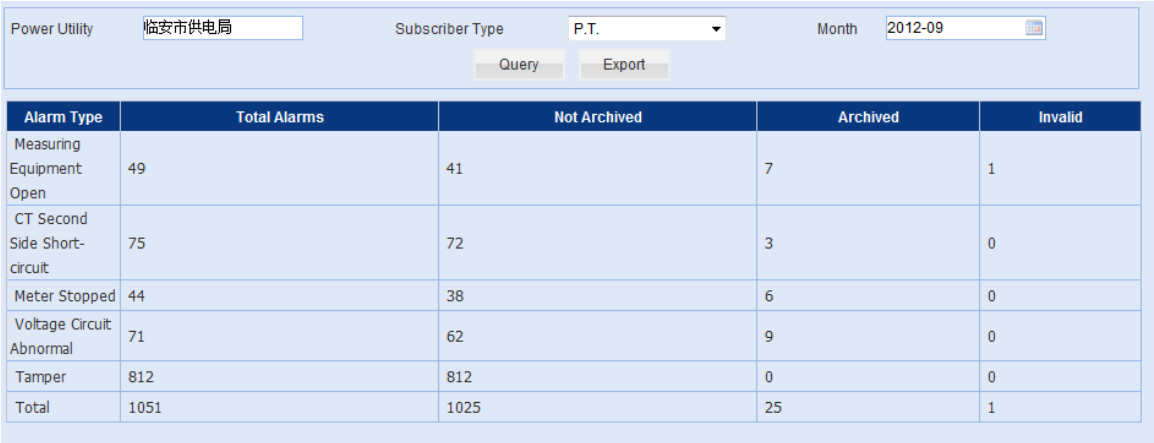
18.3. Alarm Statistics

[Menu] Diagnostic > Alarms > Alarm Statistics

[Function] This is for making records for alarm processing.

[Step]

1) Select one Power Utility node at the left meter tree, and key in “Subscriber Type, and Month”, then click “Query” button. The system will display the alarm processing records of different types of alarms of this Power Utility. The displayed information includes Total Alarms, Not Archived, Archived, and Invalid.



Alarm Type	Total Alarms	Not Archived	Archived	Invalid
Measuring Equipment Open	49	41	7	1
CT Second Side Short-circuit	75	72	3	0
Meter Stopped	44	38	6	0
Voltage Circuit Abnormal	71	62	9	0
Tamper	812	812	0	0
Total	1051	1025	25	1

Figure 385 Alarm processing records

2) Click “Export” button to export the alarm processing records to EXCEL file.

19. User Archives Query

19.1. User Archives Query

[Menu] Statistics > Single User Query> User Archives Query

[Function] this is for checking the archive of single user, user information, contact information, information of meter and terminal under this user.

[Step]

Select one meter node at the left tree, then the system will show the Customer No. and Customer Name of the meter in the “User Archives Query” interface.

Click “Query” button and the user archive information will be shown in the Customer Archives, Contact Archives, and Meter Archives.

User Archive: user’s basic information;

Contact archive: list of contactors of the user;

Meter archive: information of all the meters that is associated with the user.

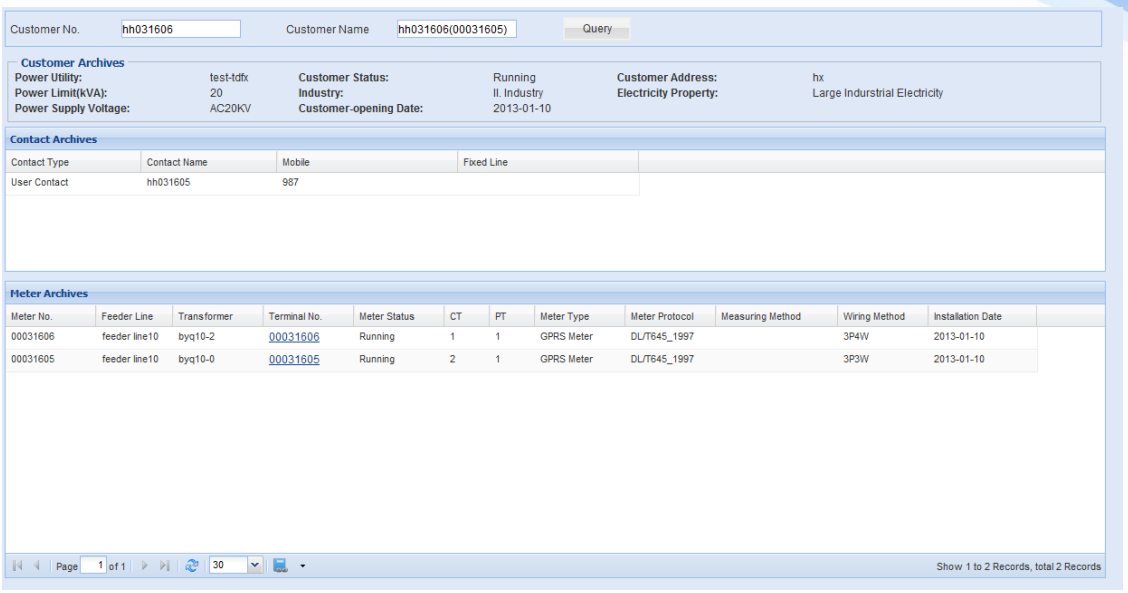

Customer No. hh031606
Customer Name hh031606(00031605)
Query
Customer Archives
Power Utility: test-tdfx
Power Limit(kVA): 20
Power Supply Voltage: AC20KV
Customer Status: Running
Industry: II. Industry
Customer-opening Date: 2013-01-10
Customer Address: hx
Electricity Property: Large Industrial Electricity
Contact Archives
Contact Type | Contact Name | Mobile | Fixed Line
User Contact | hh031605 | 987
Meter Archives
Meter No. | Feeder Line | Transformer | Terminal No. | Meter Status | CT | PT | Meter Type | Meter Protocol | Measuring Method | Wiring Method | Installation Date
00031606 | feeder line10 | byq10-2 | 00031606 | Running | 1 | 1 | GPRS Meter | DL/T645_1997 | | 3P4W | 2013-01-10
00031605 | feeder line10 | byq10-0 | 00031605 | Running | 2 | 1 | GPRS Meter | DL/T645_1997 | | 3P3W | 2013-01-10
Page 1 of 1
30
Show 1 to 2 Records, total 2 Records

Figure 386 Check user archive

Click the link of "Terminal No." to check the equipment archive.

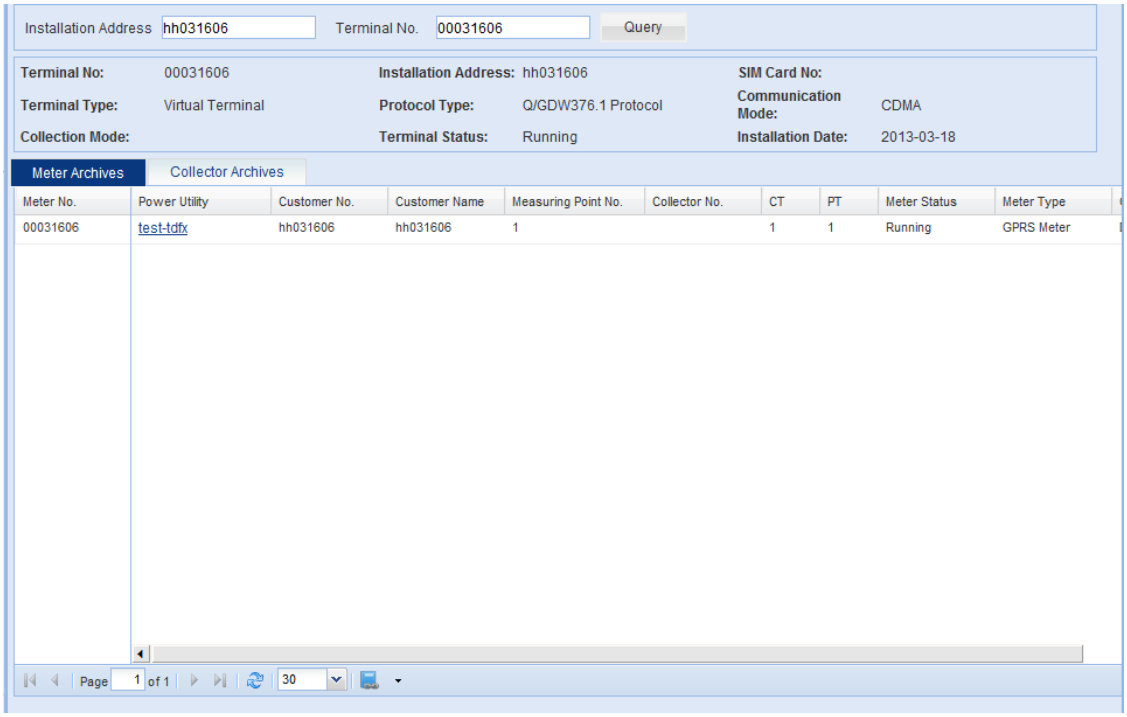

Installation Address hh031606
Terminal No. 00031606
Query
Terminal No: 00031606
Terminal Type: Virtual Terminal
Collection Mode:
Installation Address: hh031606
Protocol Type: Q/GDW376.1 Protocol
Terminal Status: Running
SIM Card No:
Communication Mode: CDMA
Installation Date: 2013-03-18
Meter Archives
Collector Archives
Meter No. | Power Utility | Customer No. | Customer Name | Measuring Point No. | Collector No. | CT | PT | Meter Status | Meter Type
00031606 | test-tdfx | hh031606 | hh031606 | 1 | | 1 | 1 | Running | GPRS Meter
Page 1 of 1
30

Figure 387 Check equipment archive

19.2. Meter Reading Data Query

[Menu] Statistics > Single Customer Query> Meter Reading Data Query

[Function] this is for checking the meter reading data.

[Step] Select one meter at the left meter tree, and you can get the Meter No.. Select the Date Type, Start Date and End Date that need to be checked, then click “Query” button to check the meter reading data list of meters. And a chart according to the list will be shown in the interface. The chart can display energy consumption data and (Maximum Demand)MD data. The two types of data can be switched by changing in the TAB page.

Select “Energy curve”:

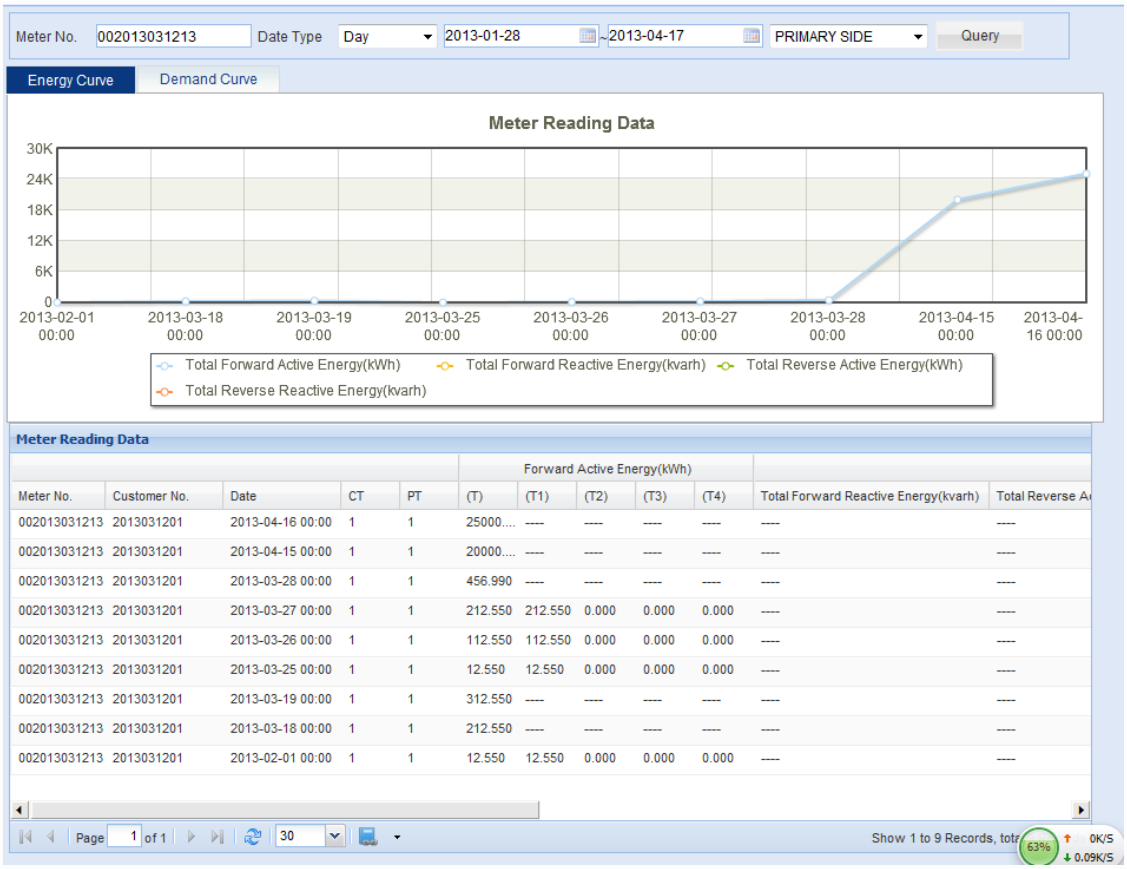


Figure 388 Energy consumption data

Select “Demand curve”:

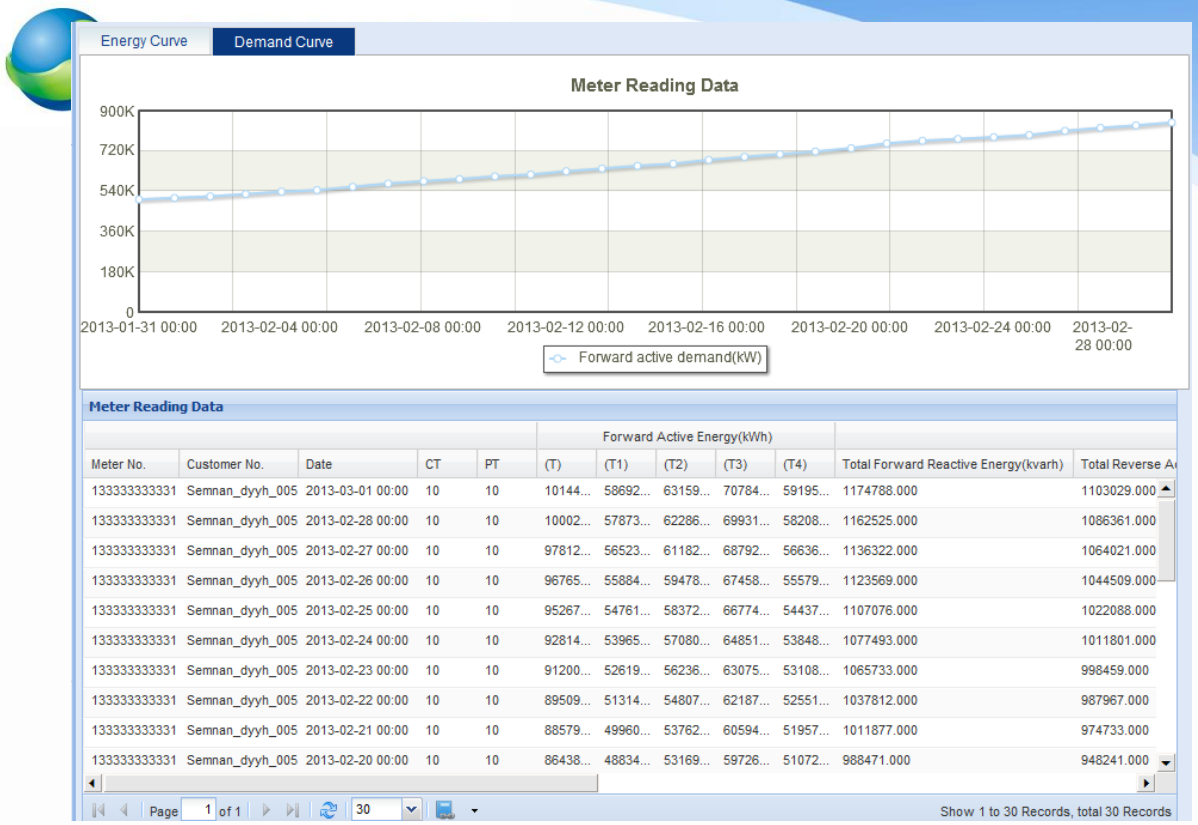


Figure 389 MD data

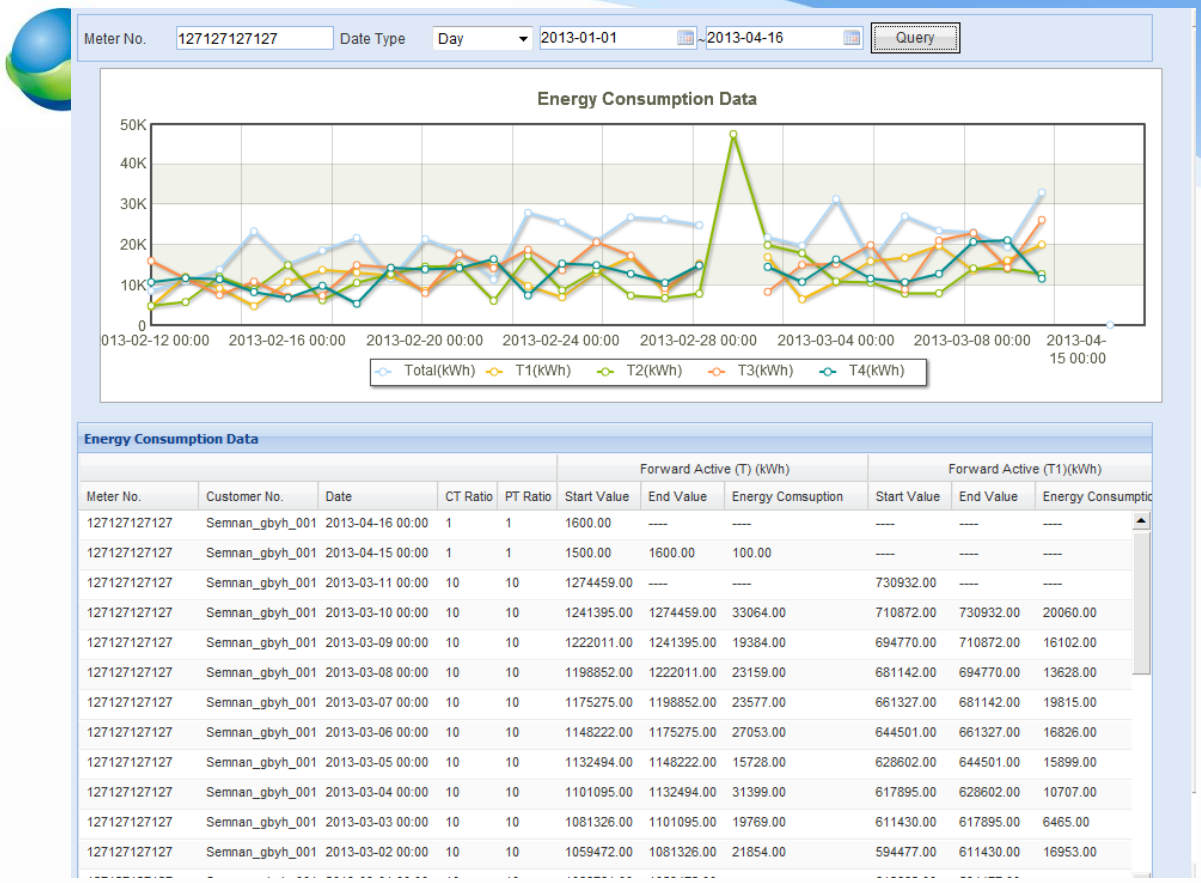
19.3. Energy Consumption Data Query

[Menu] Statistics > Single Customer Query> Energy Consumption Data

[Function] This is for checking the energy consumption data.

[Step]

Select one meter at the left meter tree, and you can get the Meter No.. Select the Date Type, Start Date and End Date that need to be checked, then click “Query” button to check the energy consumption data of user. And a chart according to this information will be shown in the interface.



					Forward Active (T) (kWh)			Forward Active (T1)(kWh)		
Meter No.	Customer No.	Date	CT Ratio	PT Ratio	Start Value	End Value	Energy Comsuption	Start Value	End Value	Energy Consumptic
127127127127	Semnan_gbyh_001	2013-04-16 00:00	1	1	1600.00	----	----	----	----	----
127127127127	Semnan_gbyh_001	2013-04-15 00:00	1	1	1500.00	1600.00	100.00	----	----	----
127127127127	Semnan_gbyh_001	2013-03-11 00:00	10	10	1274459.00	----	----	730932.00	----	----
127127127127	Semnan_gbyh_001	2013-03-10 00:00	10	10	1241395.00	1274459.00	33064.00	710872.00	730932.00	20060.00
127127127127	Semnan_gbyh_001	2013-03-09 00:00	10	10	1222011.00	1241395.00	19384.00	694770.00	710872.00	16102.00
127127127127	Semnan_gbyh_001	2013-03-08 00:00	10	10	1198852.00	1222011.00	23159.00	681142.00	694770.00	13628.00
127127127127	Semnan_gbyh_001	2013-03-07 00:00	10	10	1175275.00	1198852.00	23577.00	661327.00	681142.00	19815.00
127127127127	Semnan_gbyh_001	2013-03-06 00:00	10	10	1148222.00	1175275.00	27053.00	644501.00	661327.00	16826.00
127127127127	Semnan_gbyh_001	2013-03-05 00:00	10	10	1132494.00	1148222.00	15728.00	628602.00	644501.00	15899.00
127127127127	Semnan_gbyh_001	2013-03-04 00:00	10	10	1101095.00	1132494.00	31399.00	617895.00	628602.00	10707.00
127127127127	Semnan_gbyh_001	2013-03-03 00:00	10	10	1081326.00	1101095.00	19769.00	611430.00	617895.00	6465.00
127127127127	Semnan_gbyh_001	2013-03-02 00:00	10	10	1059472.00	1081326.00	21854.00	594477.00	611430.00	16953.00

Figure 390 Energy consumption data

19.4. Load Data Query

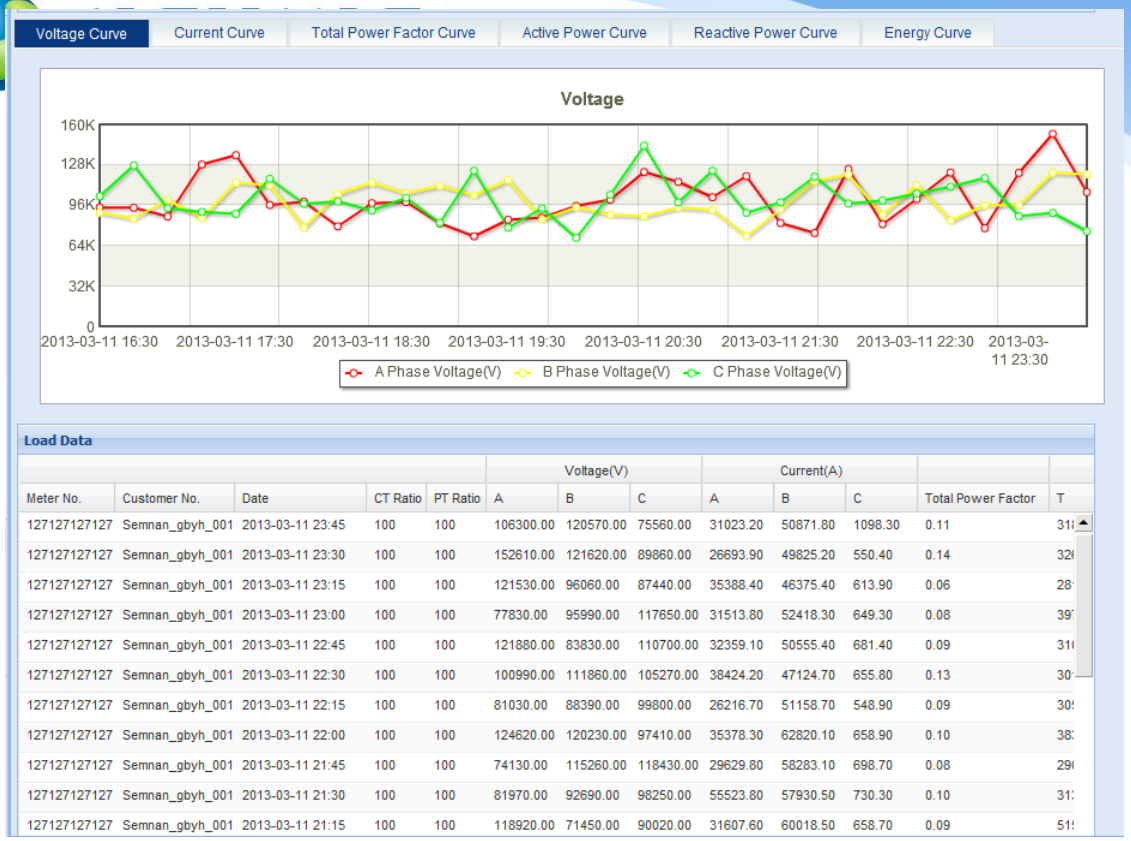
[Menu] Statistics > Single Customer Query> Load Data Query

[Function] This is for checking the load data.

[Step]

Select one meter at the left meter tree, and you can get the Meter No.. Select the Start Date and End Date that need to be checked, then click “Query” button to check the load data of user. And a chart according to this information will be shown in the interface. The chart can display Voltage curve, Current curve, Total power factor curve, Active Power Curve, Reactive Power Curve, and Energy Curve. The different types of data can be switched by changing in the TAB page.

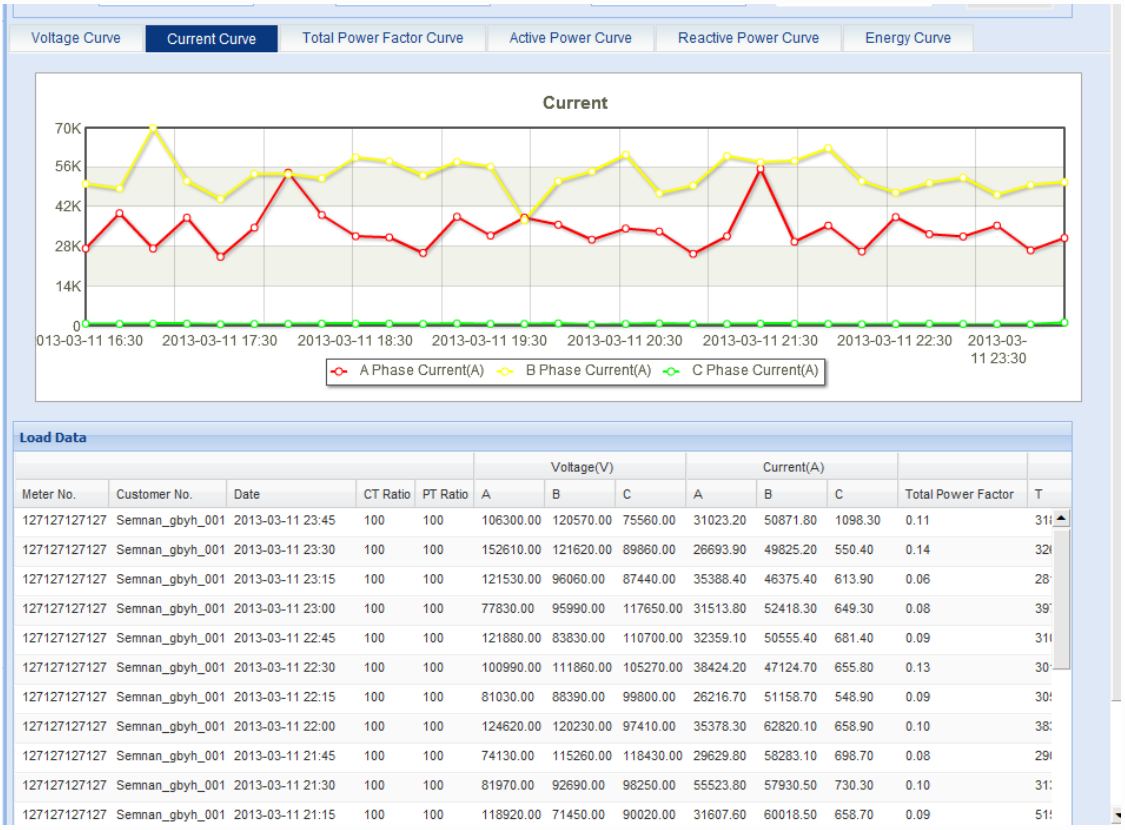
Select “Voltage curve”:



					Voltage(V)			Current(A)				
Meter No.	Customer No.	Date	CT Ratio	PT Ratio	A	B	C	A	B	C	Total Power Factor	T
127127127127	Semnan_gbyh_001	2013-03-11 23:45	100	100	106300.00	120570.00	75560.00	31023.20	50871.80	1098.30	0.11	31
127127127127	Semnan_gbyh_001	2013-03-11 23:30	100	100	152610.00	121620.00	89860.00	26693.90	49825.20	550.40	0.14	32
127127127127	Semnan_gbyh_001	2013-03-11 23:15	100	100	121530.00	96060.00	87440.00	35388.40	46375.40	613.90	0.06	28
127127127127	Semnan_gbyh_001	2013-03-11 23:00	100	100	77830.00	95990.00	117650.00	31513.80	52418.30	649.30	0.08	39
127127127127	Semnan_gbyh_001	2013-03-11 22:45	100	100	121880.00	83830.00	110700.00	32359.10	50555.40	681.40	0.09	31
127127127127	Semnan_gbyh_001	2013-03-11 22:30	100	100	100990.00	111860.00	105270.00	38424.20	47124.70	655.80	0.13	30
127127127127	Semnan_gbyh_001	2013-03-11 22:15	100	100	81030.00	88390.00	99800.00	26216.70	51158.70	548.90	0.09	30
127127127127	Semnan_gbyh_001	2013-03-11 22:00	100	100	124620.00	120230.00	97410.00	35378.30	62820.10	658.90	0.10	38
127127127127	Semnan_gbyh_001	2013-03-11 21:45	100	100	74130.00	115260.00	118430.00	29629.80	58283.10	698.70	0.08	29
127127127127	Semnan_gbyh_001	2013-03-11 21:30	100	100	81970.00	92690.00	98250.00	55523.80	57930.50	730.30	0.10	31
127127127127	Semnan_gbyh_001	2013-03-11 21:15	100	100	118920.00	71450.00	90020.00	31607.60	60018.50	658.70	0.09	51

Figure 391 Voltage curve and load data

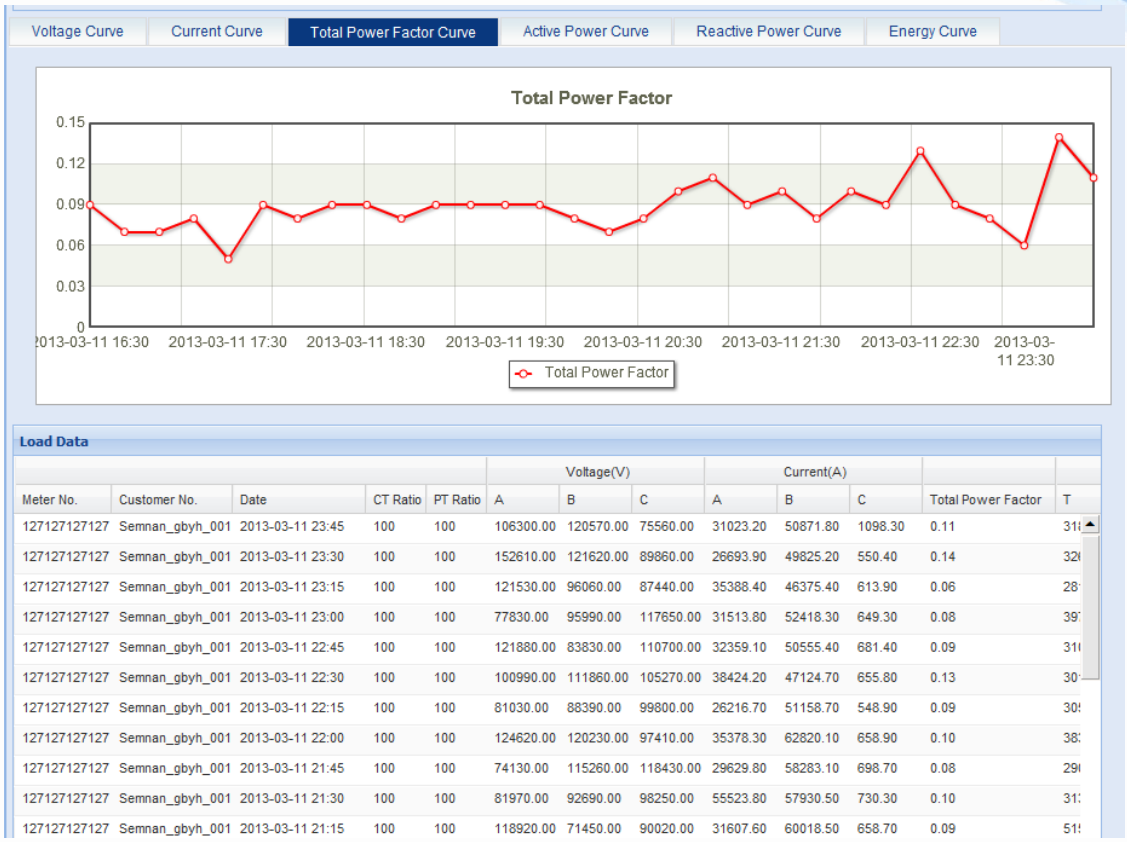
Select “Current curve”:



					Voltage(V)			Current(A)				
Meter No.	Customer No.	Date	CT Ratio	PT Ratio	A	B	C	A	B	C	Total Power Factor	T
127127127127	Semnan_gbyh_001	2013-03-11 23:45	100	100	106300.00	120570.00	75560.00	31023.20	50871.80	1098.30	0.11	31
127127127127	Semnan_gbyh_001	2013-03-11 23:30	100	100	152610.00	121620.00	89860.00	26693.90	49825.20	550.40	0.14	32
127127127127	Semnan_gbyh_001	2013-03-11 23:15	100	100	121530.00	96060.00	87440.00	35388.40	46375.40	613.90	0.06	28
127127127127	Semnan_gbyh_001	2013-03-11 23:00	100	100	77830.00	95990.00	117650.00	31513.80	52418.30	649.30	0.08	39
127127127127	Semnan_gbyh_001	2013-03-11 22:45	100	100	121880.00	83830.00	110700.00	32359.10	50555.40	681.40	0.09	31
127127127127	Semnan_gbyh_001	2013-03-11 22:30	100	100	100990.00	111860.00	105270.00	38424.20	47124.70	655.80	0.13	30
127127127127	Semnan_gbyh_001	2013-03-11 22:15	100	100	81030.00	88390.00	99800.00	26216.70	51158.70	548.90	0.09	30
127127127127	Semnan_gbyh_001	2013-03-11 22:00	100	100	124620.00	120230.00	97410.00	35378.30	62820.10	658.90	0.10	38
127127127127	Semnan_gbyh_001	2013-03-11 21:45	100	100	74130.00	115260.00	118430.00	29629.80	58283.10	698.70	0.08	29
127127127127	Semnan_gbyh_001	2013-03-11 21:30	100	100	81970.00	92690.00	98250.00	55523.80	57930.50	730.30	0.10	31
127127127127	Semnan_gbyh_001	2013-03-11 21:15	100	100	118920.00	71450.00	90020.00	31607.60	60018.50	658.70	0.09	51

Figure 392 Current curve and load data

Select “Total power factor curve”:

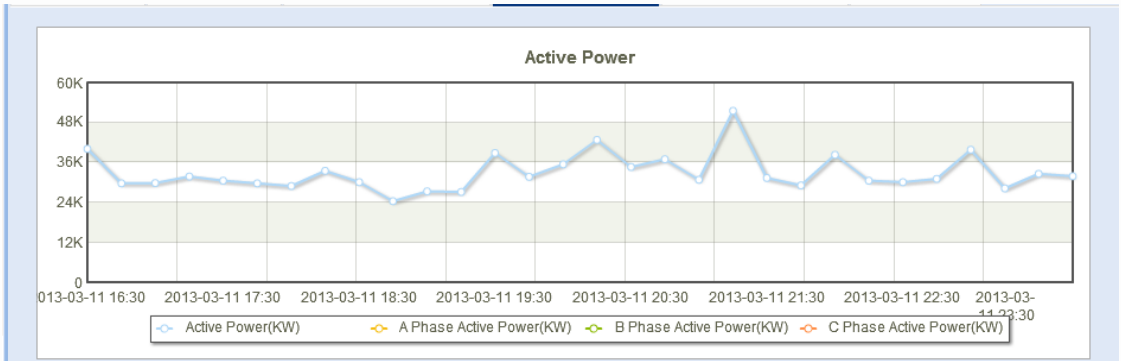


Load Data

					Voltage(V)			Current(A)				
Meter No.	Customer No.	Date	CT Ratio	PT Ratio	A	B	C	A	B	C	Total Power Factor	T
127127127127	Semnan_gbyh_001	2013-03-11 23:45	100	100	106300.00	120570.00	75560.00	31023.20	50871.80	1098.30	0.11	31
127127127127	Semnan_gbyh_001	2013-03-11 23:30	100	100	152610.00	121620.00	89860.00	26693.90	49825.20	550.40	0.14	32
127127127127	Semnan_gbyh_001	2013-03-11 23:15	100	100	121530.00	96060.00	87440.00	35388.40	46375.40	613.90	0.06	28
127127127127	Semnan_gbyh_001	2013-03-11 23:00	100	100	77830.00	95990.00	117650.00	31513.80	52418.30	649.30	0.08	39
127127127127	Semnan_gbyh_001	2013-03-11 22:45	100	100	121880.00	83830.00	110700.00	32359.10	50555.40	681.40	0.09	31
127127127127	Semnan_gbyh_001	2013-03-11 22:30	100	100	100990.00	111860.00	105270.00	38424.20	47124.70	655.80	0.13	30
127127127127	Semnan_gbyh_001	2013-03-11 22:15	100	100	81030.00	88390.00	99800.00	26216.70	51158.70	548.90	0.09	30
127127127127	Semnan_gbyh_001	2013-03-11 22:00	100	100	124620.00	120230.00	97410.00	35378.30	62820.10	658.90	0.10	38
127127127127	Semnan_gbyh_001	2013-03-11 21:45	100	100	74130.00	115260.00	118430.00	29629.80	58283.10	698.70	0.08	29
127127127127	Semnan_gbyh_001	2013-03-11 21:30	100	100	81970.00	92690.00	98250.00	55523.80	57930.50	730.30	0.10	31
127127127127	Semnan_gbyh_001	2013-03-11 21:15	100	100	118920.00	71450.00	90020.00	31607.60	60018.50	658.70	0.09	51

Figure 393 Total power factor curve and load data

Select “Active Power curve”:

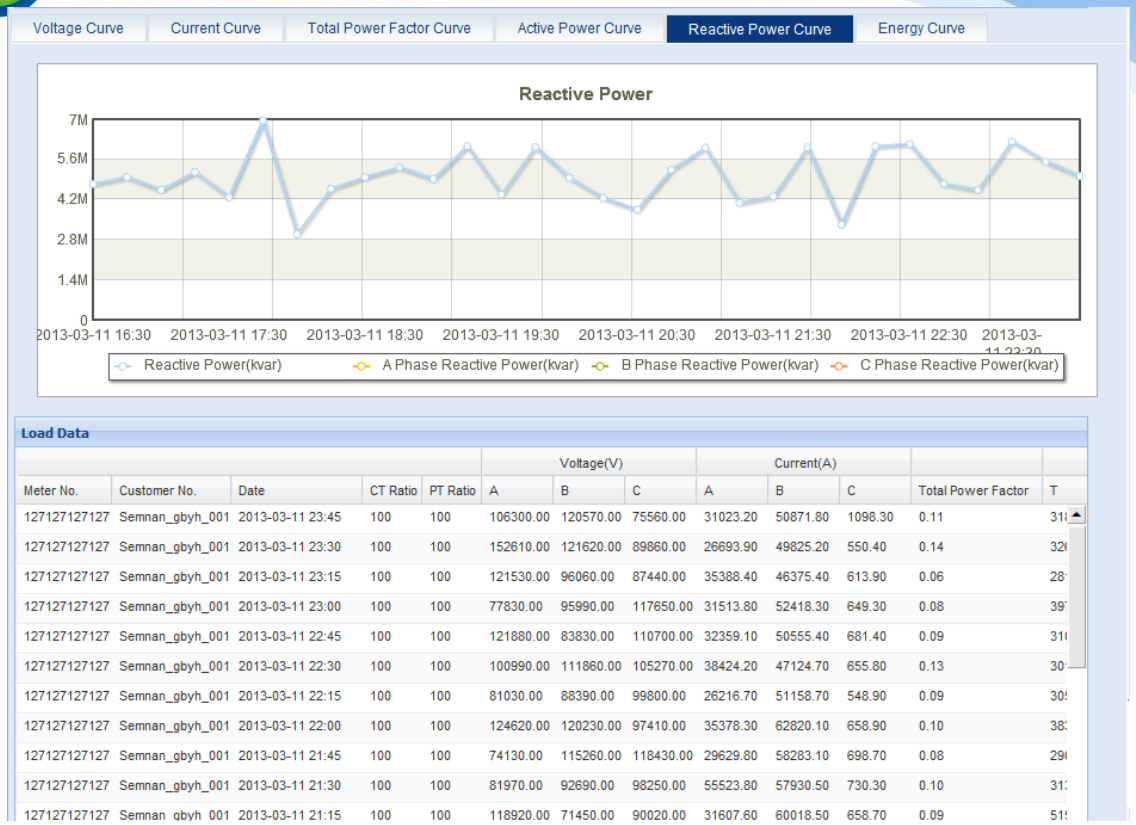


Load Data

					Voltage(V)			Current(A)				
Meter No.	Customer No.	Date	CT Ratio	PT Ratio	A	B	C	A	B	C	Total Power Factor	T
127127127127	Semnan_gbyh_001	2013-03-11 23:45	100	100	106300.00	120570.00	75560.00	31023.20	50871.80	1098.30	0.11	31
127127127127	Semnan_gbyh_001	2013-03-11 23:30	100	100	152610.00	121620.00	89860.00	26693.90	49825.20	550.40	0.14	32
127127127127	Semnan_gbyh_001	2013-03-11 23:15	100	100	121530.00	96060.00	87440.00	35388.40	46375.40	613.90	0.06	28
127127127127	Semnan_gbyh_001	2013-03-11 23:00	100	100	77830.00	95990.00	117650.00	31513.80	52418.30	649.30	0.08	39
127127127127	Semnan_gbyh_001	2013-03-11 22:45	100	100	121880.00	83830.00	110700.00	32359.10	50555.40	681.40	0.09	31
127127127127	Semnan_gbyh_001	2013-03-11 22:30	100	100	100990.00	111860.00	105270.00	38424.20	47124.70	655.80	0.13	30
127127127127	Semnan_gbyh_001	2013-03-11 22:15	100	100	81030.00	88390.00	99800.00	26216.70	51158.70	548.90	0.09	30
127127127127	Semnan_gbyh_001	2013-03-11 22:00	100	100	124620.00	120230.00	97410.00	35378.30	62820.10	658.90	0.10	38
127127127127	Semnan_gbyh_001	2013-03-11 21:45	100	100	74130.00	115260.00	118430.00	29629.80	58283.10	698.70	0.08	29
127127127127	Semnan_gbyh_001	2013-03-11 21:30	100	100	81970.00	92690.00	98250.00	55523.80	57930.50	730.30	0.10	31
127127127127	Semnan_gbyh_001	2013-03-11 21:15	100	100	118920.00	71450.00	90020.00	31607.60	60018.50	658.70	0.09	51

Figure 394 Active Power curve and load data

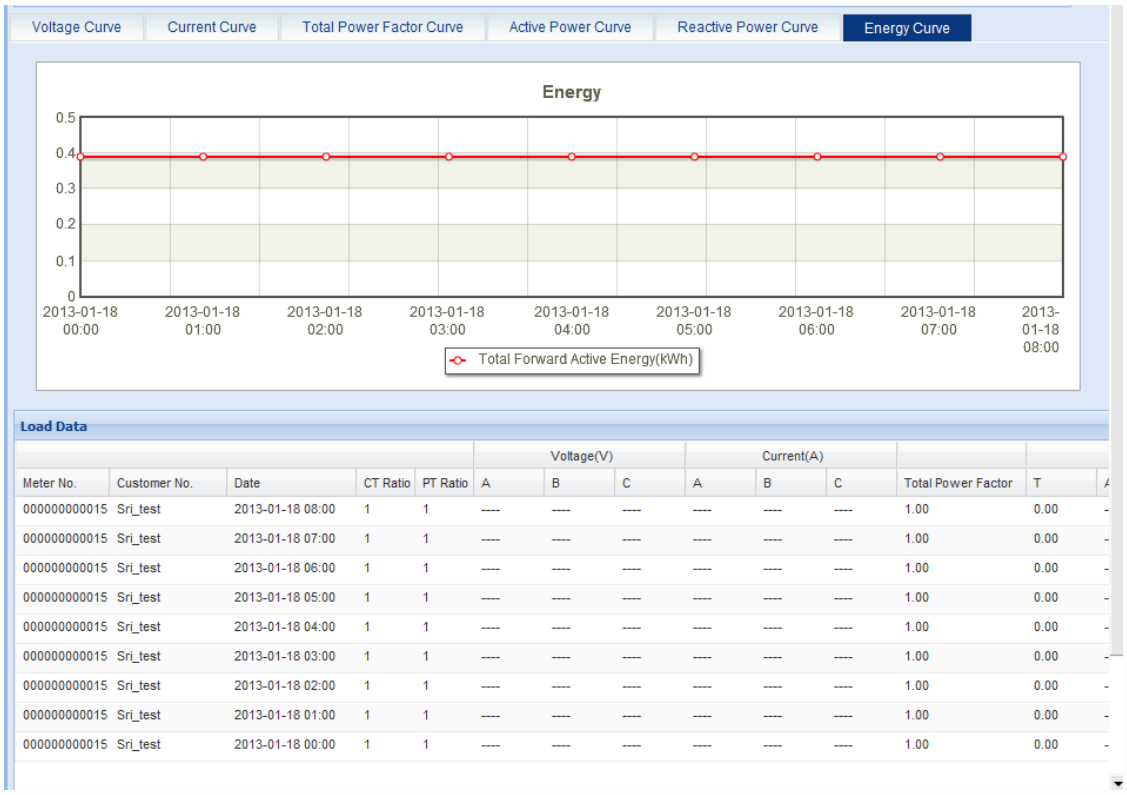
Select "Reactive Power Curve":



					Voltage(V)			Current(A)				
Meter No.	Customer No.	Date	CT Ratio	PT Ratio	A	B	C	A	B	C	Total Power Factor	T
127127127127	Semnan_gbyh_001	2013-03-11 23:45	100	100	106300.00	120570.00	75560.00	31023.20	50871.80	1098.30	0.11	31
127127127127	Semnan_gbyh_001	2013-03-11 23:30	100	100	152610.00	121620.00	89860.00	26693.90	49825.20	550.40	0.14	32
127127127127	Semnan_gbyh_001	2013-03-11 23:15	100	100	121530.00	96060.00	87440.00	35388.40	46375.40	613.90	0.06	28
127127127127	Semnan_gbyh_001	2013-03-11 23:00	100	100	77830.00	95990.00	117650.00	31513.80	52418.30	649.30	0.08	39
127127127127	Semnan_gbyh_001	2013-03-11 22:45	100	100	121880.00	83830.00	110700.00	32359.10	50555.40	681.40	0.09	31
127127127127	Semnan_gbyh_001	2013-03-11 22:30	100	100	100990.00	111860.00	105270.00	38424.20	47124.70	655.80	0.13	30
127127127127	Semnan_gbyh_001	2013-03-11 22:15	100	100	81030.00	88390.00	99800.00	26216.70	51158.70	548.90	0.09	30
127127127127	Semnan_gbyh_001	2013-03-11 22:00	100	100	124620.00	120230.00	97410.00	35378.30	62820.10	658.90	0.10	38
127127127127	Semnan_gbyh_001	2013-03-11 21:45	100	100	74130.00	115260.00	118430.00	29629.80	58283.10	698.70	0.08	29
127127127127	Semnan_gbyh_001	2013-03-11 21:30	100	100	81970.00	92690.00	98250.00	55523.80	57930.50	730.30	0.10	31
127127127127	Semnan_gbyh_001	2013-03-11 21:15	100	100	118920.00	71450.00	90020.00	31607.60	60018.50	658.70	0.09	51

Figure 395 Reactive Power curve and load data

Select "Energy Curve":



					Voltage(V)			Current(A)				
Meter No.	Customer No.	Date	CT Ratio	PT Ratio	A	B	C	A	B	C	Total Power Factor	T
000000000015	Sri_test	2013-01-18 08:00	1	1	----	----	----	----	----	----	1.00	0.00
000000000015	Sri_test	2013-01-18 07:00	1	1	----	----	----	----	----	----	1.00	0.00
000000000015	Sri_test	2013-01-18 06:00	1	1	----	----	----	----	----	----	1.00	0.00
000000000015	Sri_test	2013-01-18 05:00	1	1	----	----	----	----	----	----	1.00	0.00
000000000015	Sri_test	2013-01-18 04:00	1	1	----	----	----	----	----	----	1.00	0.00
000000000015	Sri_test	2013-01-18 03:00	1	1	----	----	----	----	----	----	1.00	0.00
000000000015	Sri_test	2013-01-18 02:00	1	1	----	----	----	----	----	----	1.00	0.00
000000000015	Sri_test	2013-01-18 01:00	1	1	----	----	----	----	----	----	1.00	0.00
000000000015	Sri_test	2013-01-18 00:00	1	1	----	----	----	----	----	----	1.00	0.00

Figure 396 Energy curve and load data

19.5. Batch Query

[Menu] Statistics> Batch Query> Group Subscriber Query

[Function] This is for check the user information. It also provides functions like user archive query, user energy consumption data query, and terminal alarm query link.

[Step]

Select the query conditions for “Power Utility, Subscriber Type, Power Limit, and Voltage Level”, click “Query” button and the query result will be displayed in the interface.

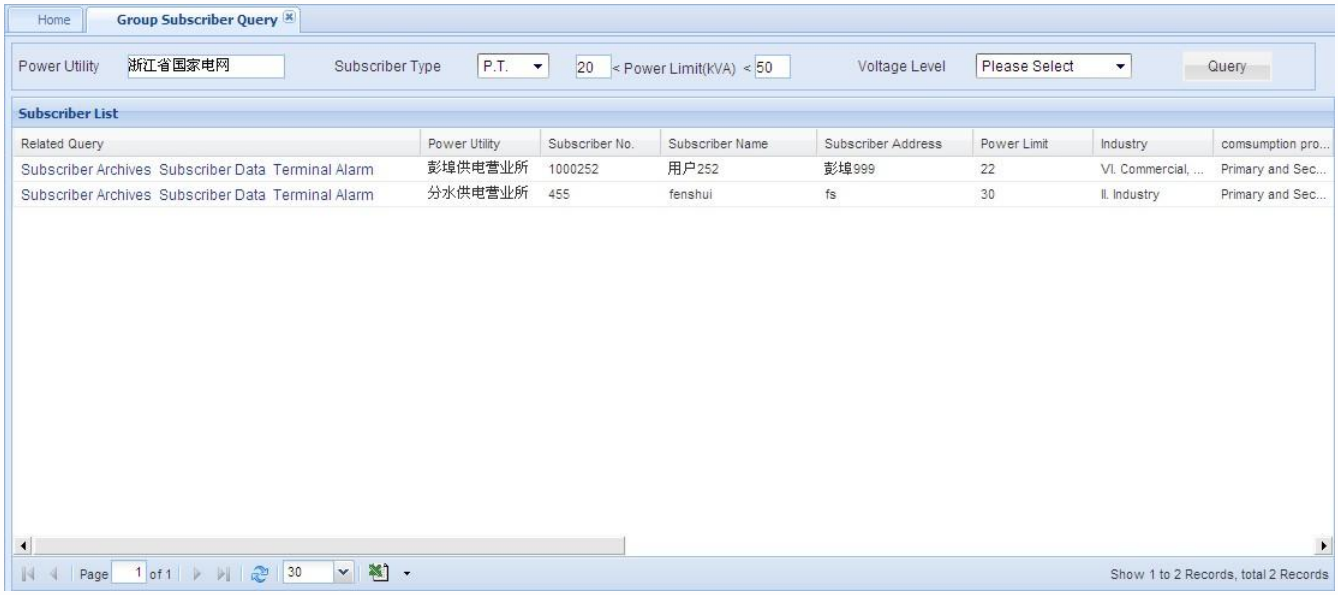


Figure 397 Batch query

Subscriber Archives: relevant user archive information is displayed here.

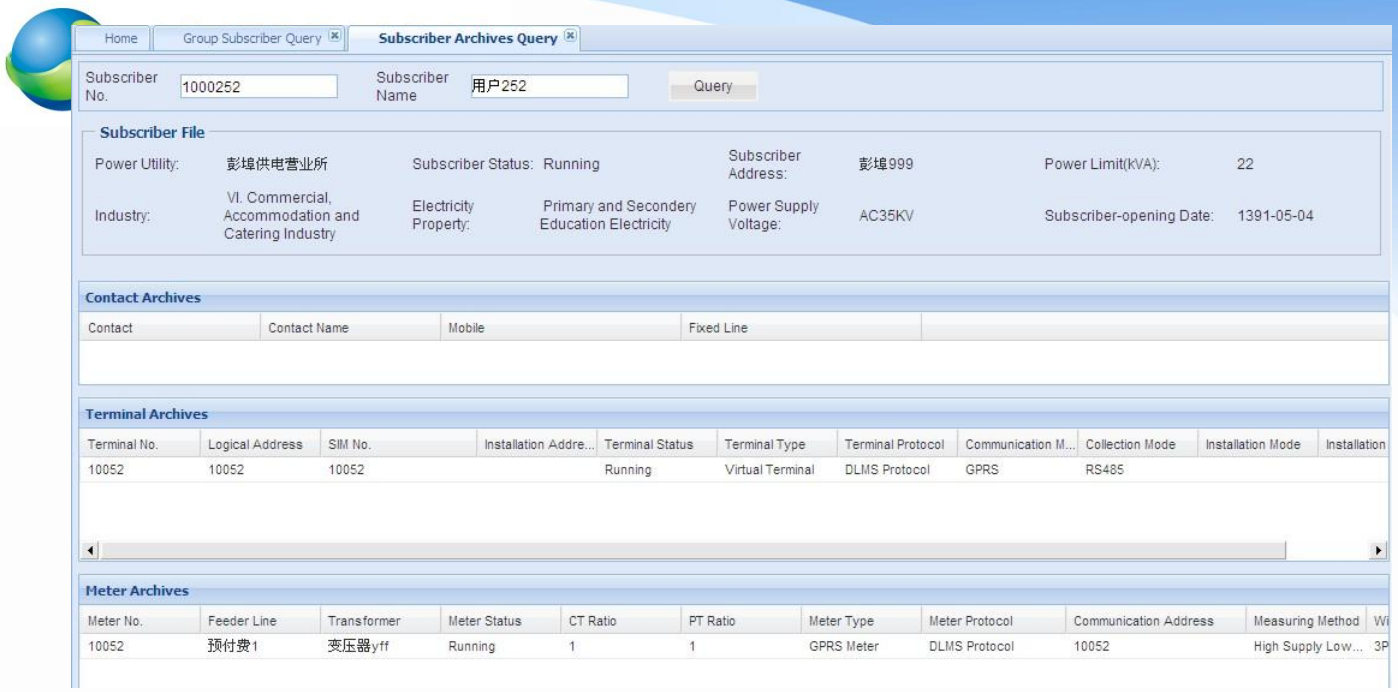


Figure 398 User archive information

Subscriber Data: relevant energy consumption data of the user is displayed here.

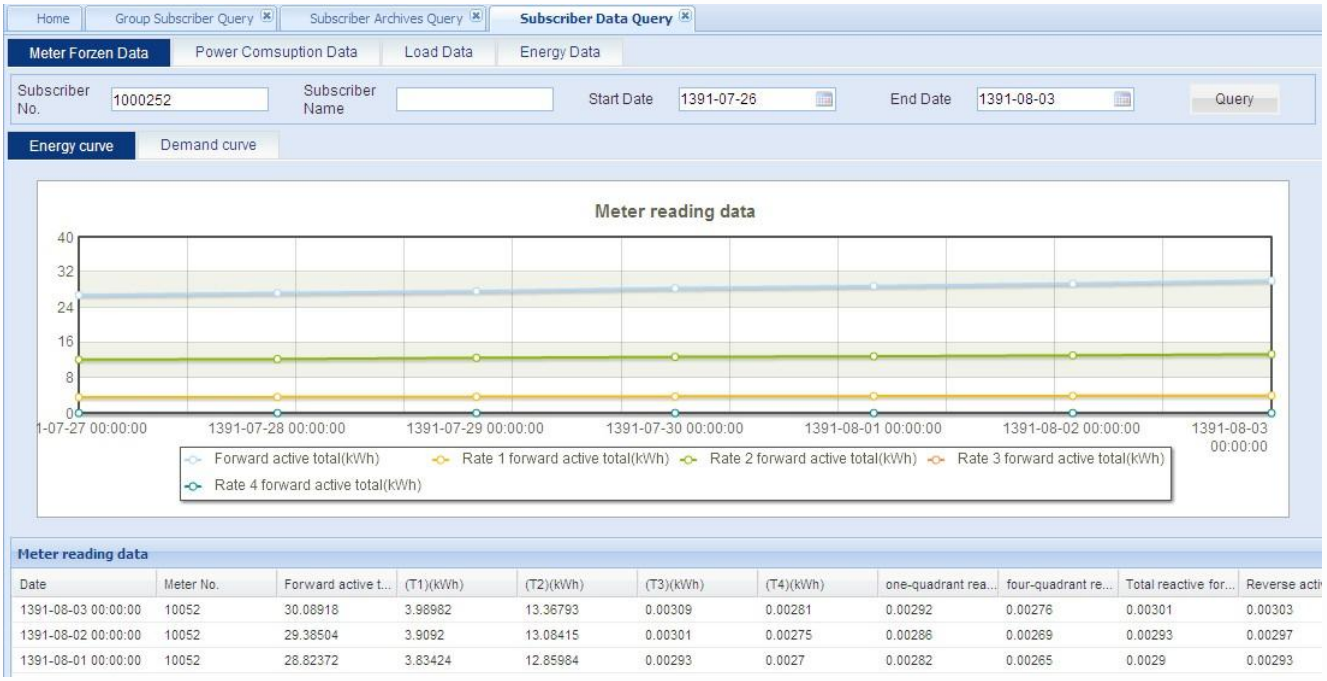


Figure 399 Energy consumption data of the user

Terminal Alarm: alarm information of terminal under the user is displayed here.

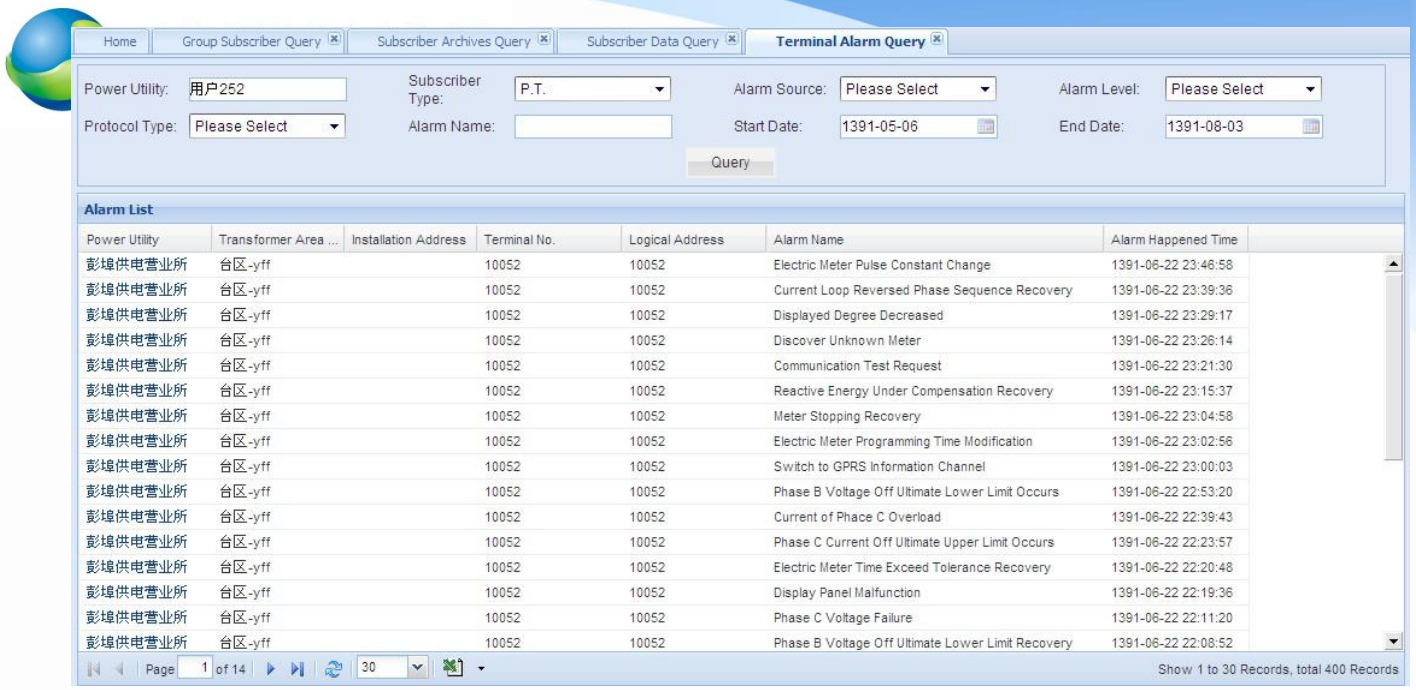

Home
Group Subscriber Query
Subscriber Archives Query
Subscriber Data Query
Terminal Alarm Query
Power Utility: 用户252
Subscriber Type: P.T.
Alarm Source: Please Select
Alarm Level: Please Select
Protocol Type: Please Select
Alarm Name:
Start Date: 1391-05-06
End Date: 1391-08-03
Query
Alarm List
Power Utility | Transformer Area ... | Installation Address | Terminal No. | Logical Address | Alarm Name | Alarm Happened Time
彭埠供电营业所 台区-yff 10052 10052 Electric Meter Pulse Constant Change 1391-06-22 23:46:58
彭埠供电营业所 台区-yff 10052 10052 Current Loop Reversed Phase Sequence Recovery 1391-06-22 23:39:36
彭埠供电营业所 台区-yff 10052 10052 Displayed Degree Decreased 1391-06-22 23:29:17
彭埠供电营业所 台区-yff 10052 10052 Discover Unknown Meter 1391-06-22 23:26:14
彭埠供电营业所 台区-yff 10052 10052 Communication Test Request 1391-06-22 23:21:30
彭埠供电营业所 台区-yff 10052 10052 Reactive Energy Under Compensation Recovery 1391-06-22 23:15:37
彭埠供电营业所 台区-yff 10052 10052 Meter Stopping Recovery 1391-06-22 23:04:58
彭埠供电营业所 台区-yff 10052 10052 Electric Meter Programming Time Modification 1391-06-22 23:02:56
彭埠供电营业所 台区-yff 10052 10052 Switch to GPRS Information Channel 1391-06-22 23:00:03
彭埠供电营业所 台区-yff 10052 10052 Phase B Voltage Off Ultimate Lower Limit Occurs 1391-06-22 22:53:20
彭埠供电营业所 台区-yff 10052 10052 Current of Phace C Overload 1391-06-22 22:39:43
彭埠供电营业所 台区-yff 10052 10052 Phase C Current Off Ultimate Upper Limit Occurs 1391-06-22 22:23:57
彭埠供电营业所 台区-yff 10052 10052 Electric Meter Time Exceed Tolerance Recovery 1391-06-22 22:20:48
彭埠供电营业所 台区-yff 10052 10052 Display Panel Malfunction 1391-06-22 22:19:36
彭埠供电营业所 台区-yff 10052 10052 Phase C Voltage Failure 1391-06-22 22:11:20
彭埠供电营业所 台区-yff 10052 10052 Phase B Voltage Off Ultimate Lower Limit Recovery 1391-06-22 22:08:52
Page 1 of 14
30
Show 1 to 30 Records, total 400 Records

Figure 400 Alarm information of terminal

20. Single Equipment Query

20.1. Equipment Records Query

[Menu] Statistics > Single Equipment Query> Meter's Archives

[Function] This is for checking the records of single equipment, basic information of terminals, and the information of meters and data collectors installed under the terminals.

[Step]

Select one equipment node at the left tree, then you can get the Installation Address and Terminal No. of the equipment. Click "Query" button and the system will check information of terminals according to the Installation Address and Terminal No. The information includes basic information of terminals and the information of meters and data collectors installed under the terminals. The information of meters and data collectors can be shown by selecting the TAB page.

Click the "Meter File" button, and information of terminal and meters installed under the

terminal will be displayed.

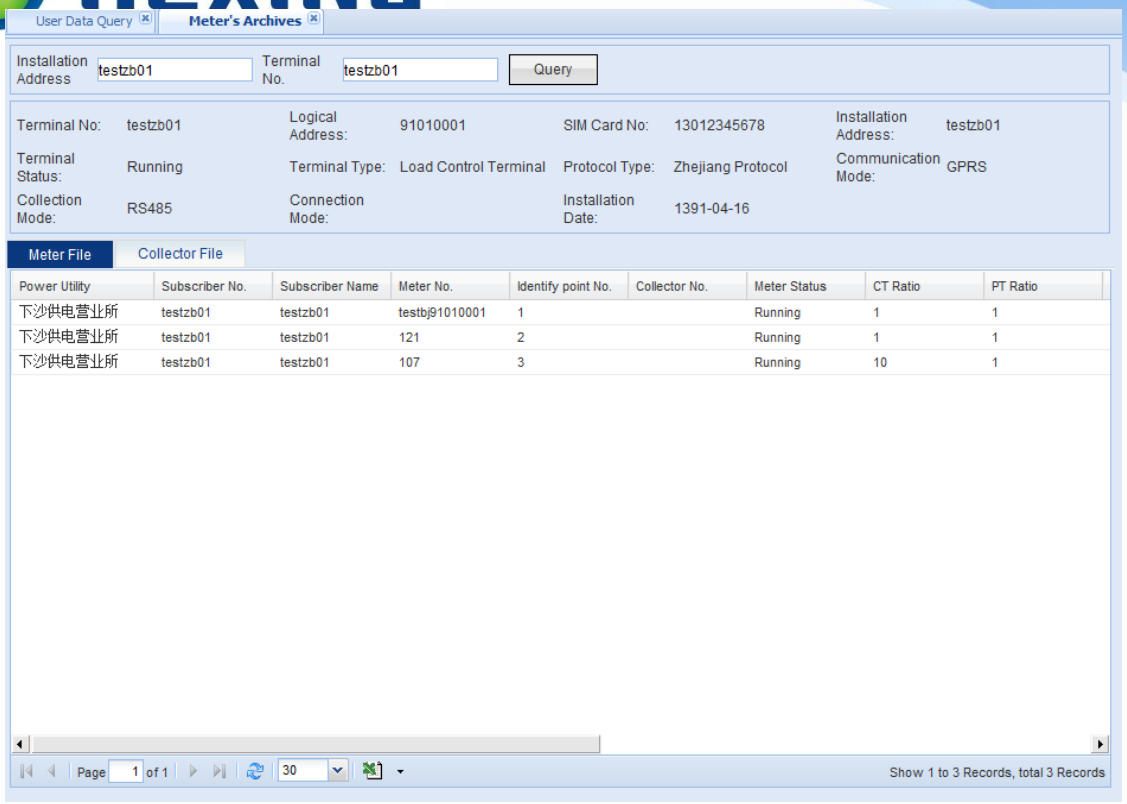


Figure 401 Information of terminal and meters installed under the terminal

Click the "Collector File" button, and information of terminal and data collectors installed under the terminal will be displayed.

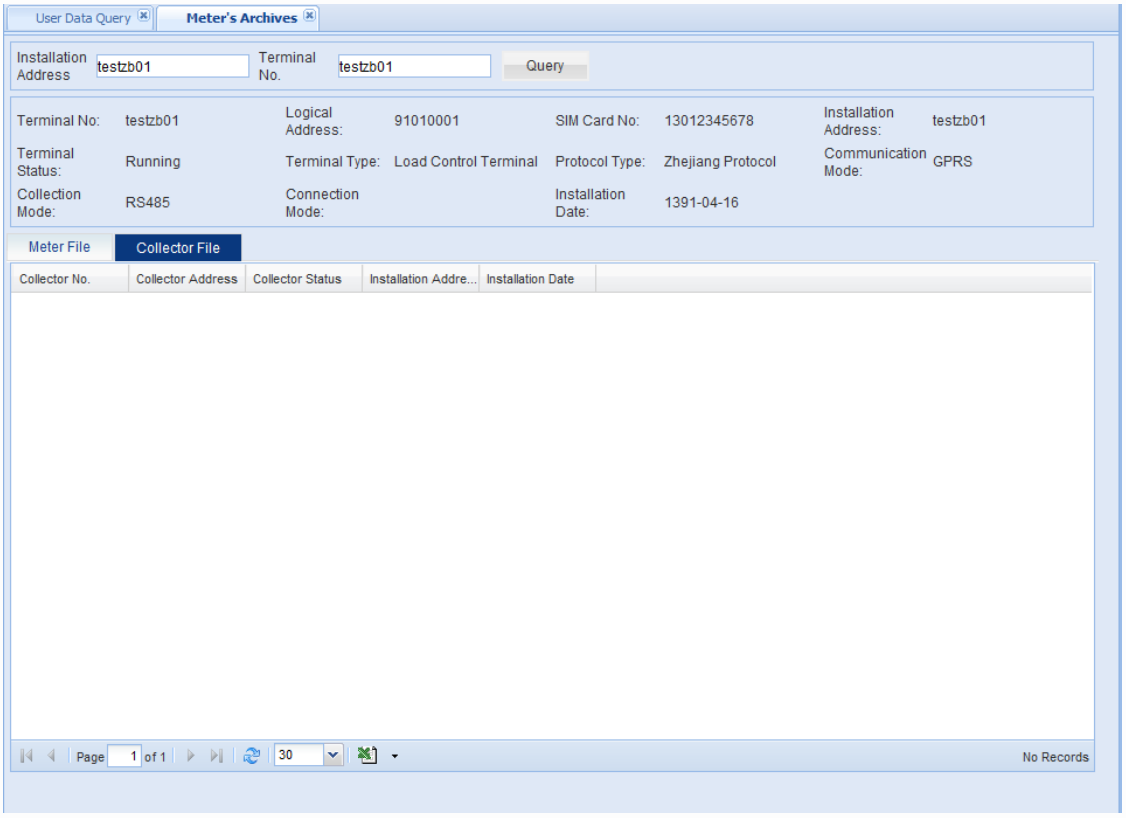


Figure 402 Information of terminal and data collectors installed under the terminal

20.2. Equipment Data Query

[Menu] Statistics > Single Equipment Query> Equipment Data Query

[Function] This is for checking the data of single equipment and detailed meter reading information of terminal.

[Step]

Select one equipment node at the left tree, then you can get the Installation Address, Terminal No., and Logical Address of the equipment. Select the "Month" and then click "Query" button and the system will check the equipment data.

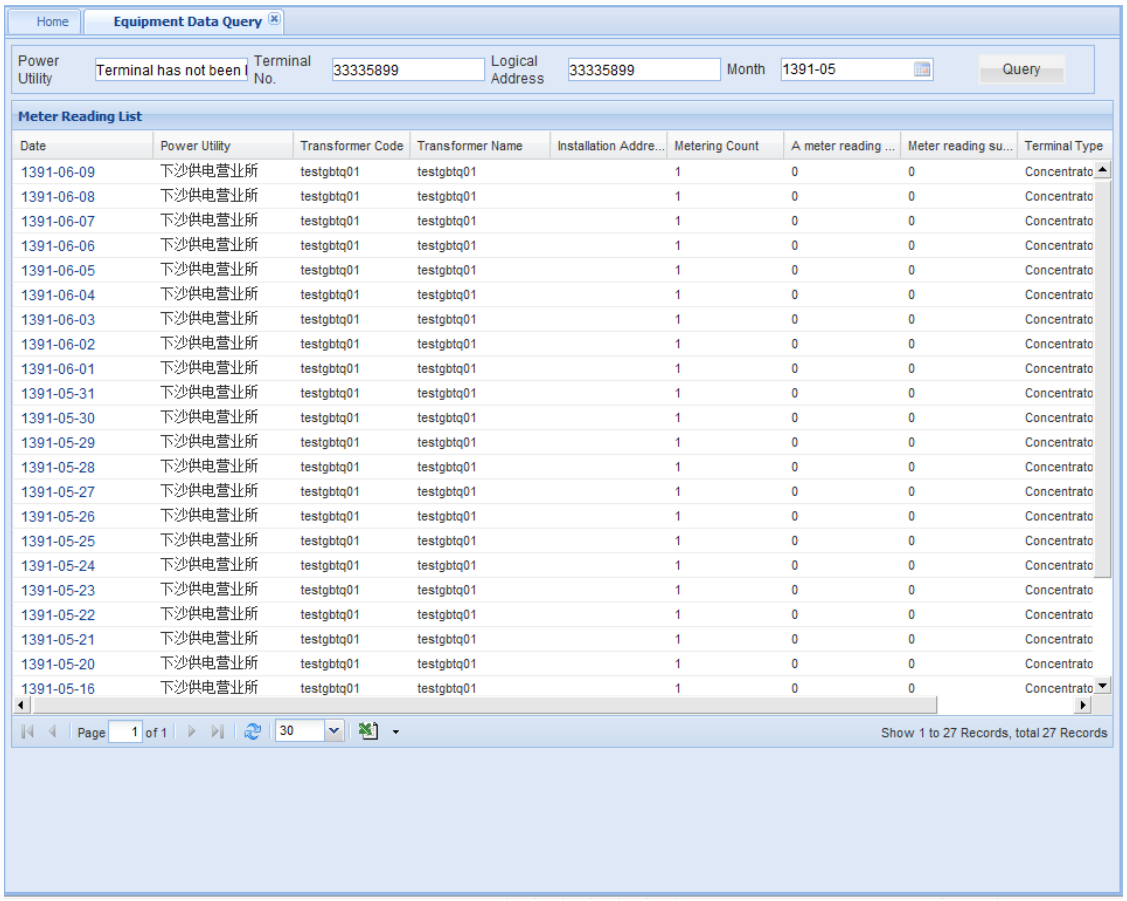

Home
Equipment Data Query
Power Utility
Terminal has not been i
Terminal No.
33335899
Logical Address
33335899
Month
1391-05
Query
Meter Reading List
Date
Power Utility
Transformer Code
Transformer Name
Installation Addre...
Metering Count
A meter reading ...
Meter reading su...
Terminal Type
1391-06-09 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-06-08 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-06-07 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-06-06 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-06-05 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-06-04 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-06-03 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-06-02 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-06-01 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-05-31 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-05-30 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-05-29 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-05-28 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-05-27 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-05-26 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-05-25 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-05-24 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-05-23 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-05-22 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-05-21 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-05-20 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
1391-05-16 下沙供电营业所 testgbtq01 testgbtq01 1 0 0 Concentrato
Page 1 of 1
30
Show 1 to 27 Records, total 27 Records

Figure 403 Equipment data

Click "Date" link in the meter reading list to get the list of meter reading details by the terminal.

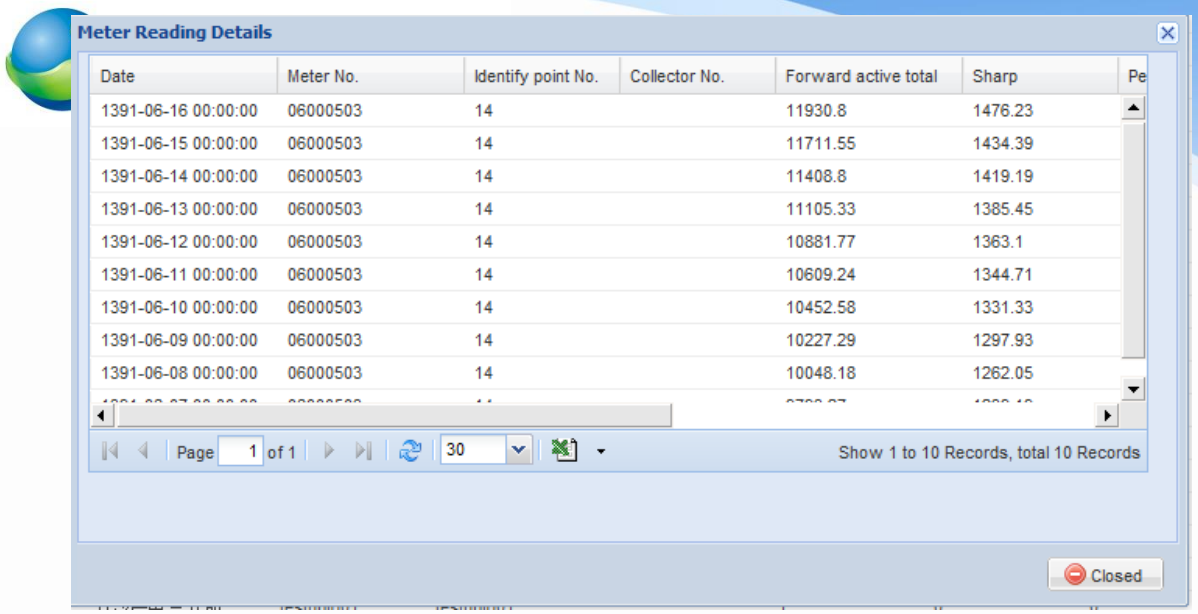


Figure 404 List of meter reading details

21. Power Outage Analysis

21.1. Power Outage Analysis

[Menu] Diagnostic>Power Outage Analysis> Power Outage Analysis

[Function] this is for checking the power outage information during one year and one month for all the terminals of the Power Utility.

[Step]

Click the menu “Power Outage Analysis” to enter the initialization interface of “Power Outage Analysis”.

Select “Year” or “Month” at TAB page, then select one specific year or month in the “Date” column to check the power outage information of terminal during one year and one month respectively;

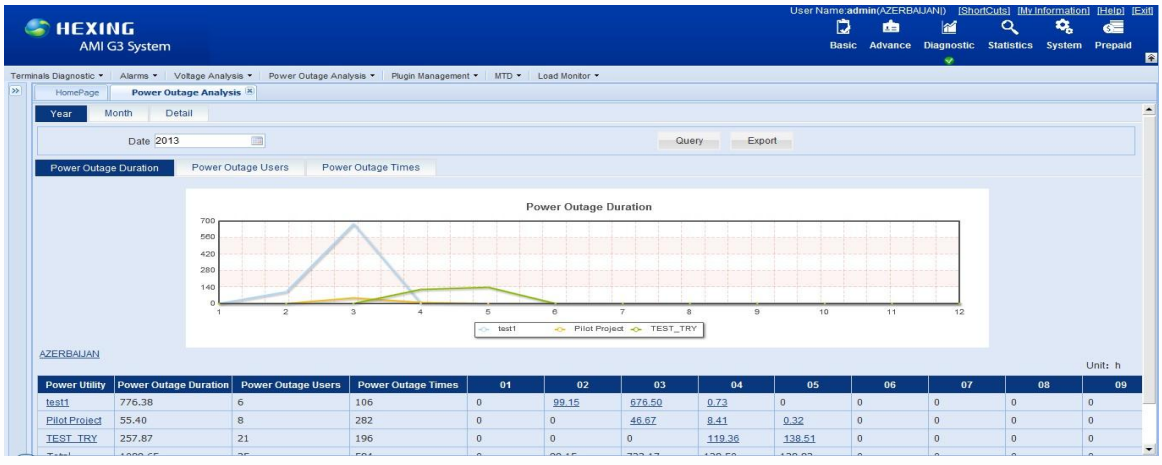

HEXING
AMI G3 System
Basic
Advance
Diagnostic
Statistics
System
Prepaid
Power Outage Analysis
Year
Month
Detail
Date 2013
Query
Export
Power Outage Duration
Power Outage Users
Power Outage Times
Power Outage Duration
AZERBAIJAN
Unit: h
Power Utility | Power Outage Duration | Power Outage Users | Power Outage Times | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09
test1 776.38 6 106 0 99.15 676.50 0.73 0 0 0 0 0
Pilot Project 55.40 8 282 0 0 46.67 8.41 0.32 0 0 0 0
TEST_TRY 257.87 21 196 0 0 0 119.36 138.51 0 0 0 0

Figure 405 Power outage information of terminal during one year

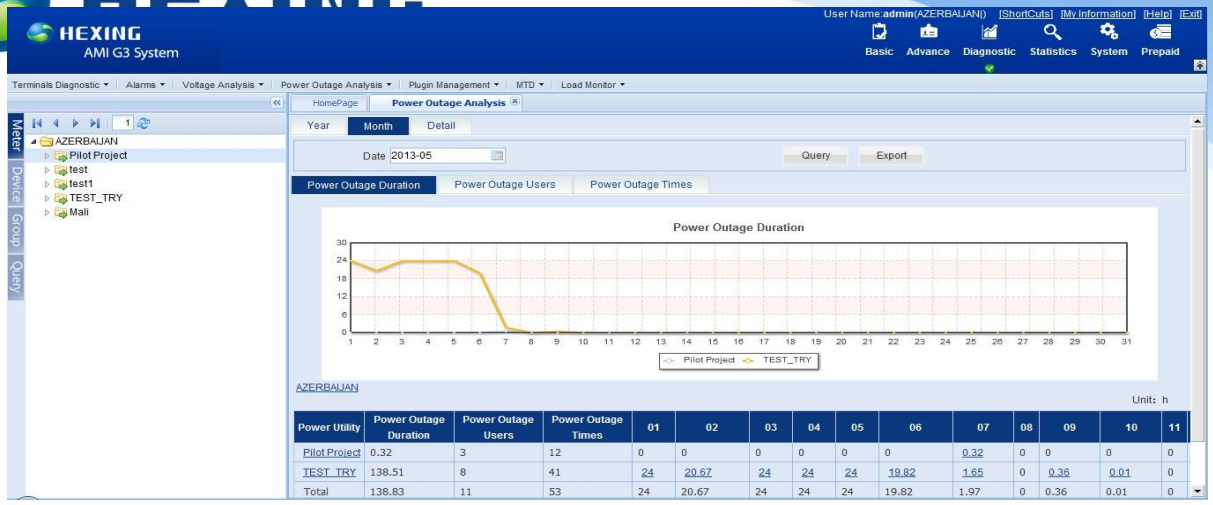


Figure 4069 Power outage information of terminal during one month

Click “Detail” at TAB page to check the detailed information of power outage for one Power Utility during one specific day, such as whether there is power outage at the terminal, whether the power supply has been restored.

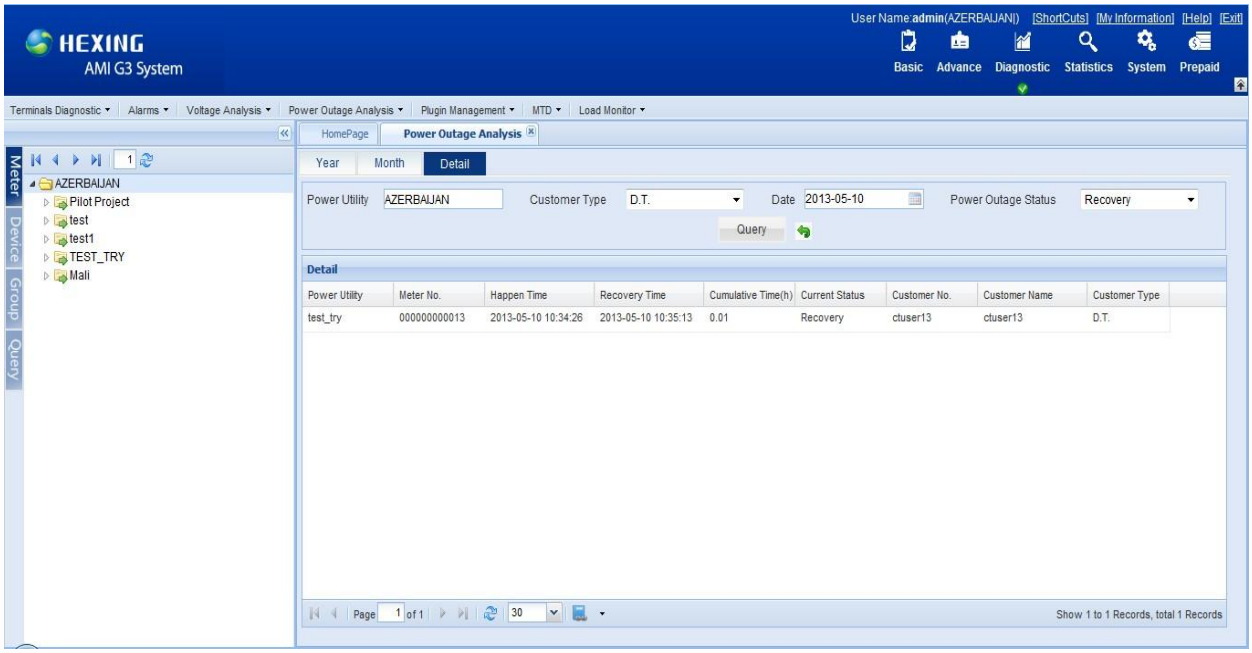


Figure 407 Power outage information of terminal during one day

Select the items “Power Outage Duration”, “Power Outage Users” and “Power Outage Times” at the TAB page to view the relevant chart.

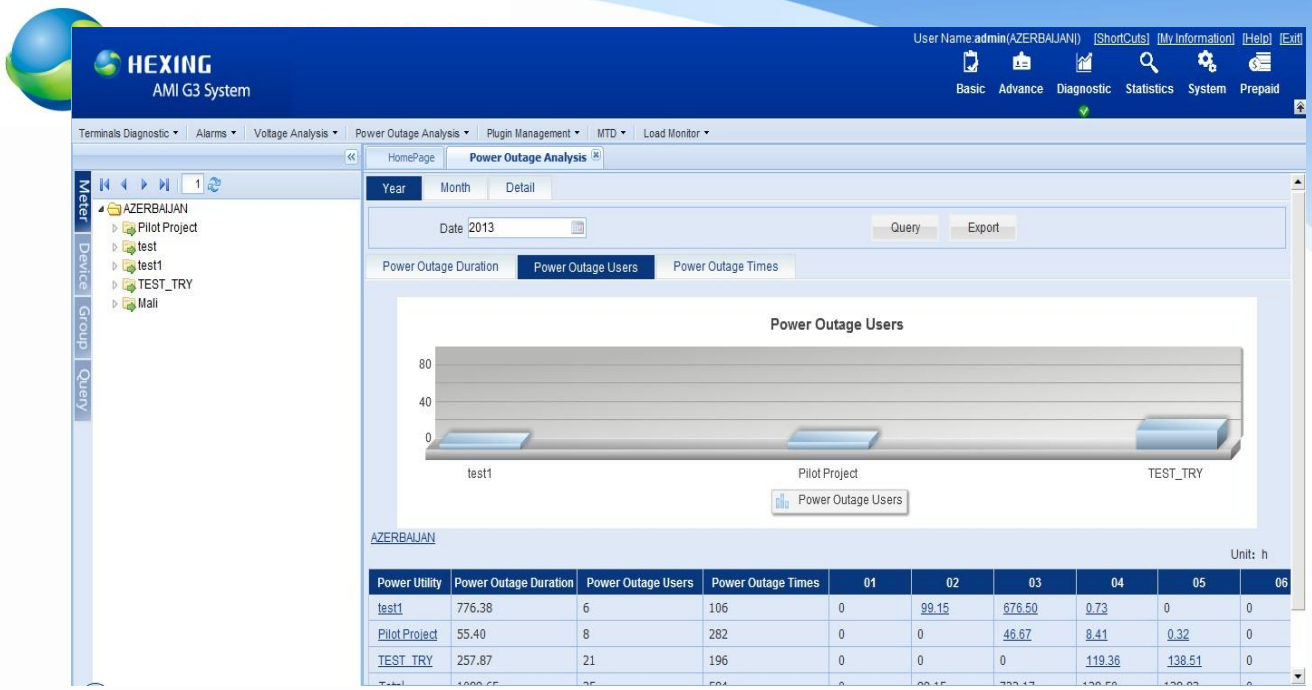

HEXING
AMI G3 System
User Name:admin(AZERBAIJAN|) [ShortCuts] [My Information] [Help] [Exit]
Basic Advance Diagnostic Statistics System Prepaid
Terminals Diagnostic Alarms Voltage Analysis Power Outage Analysis Plugin Management MTD Load Monitor
HomePage Power Outage Analysis
Meter Device Group Query
AZERBAIJAN
Pilot Project
test
test1
TEST_TRY
Mali
Year Month Detail
Date 2013
Query Export
Power Outage Duration Power Outage Users Power Outage Times
Power Outage Users
80
40
0
test1
Pilot Project
TEST_TRY
Power Outage Users
AZERBAIJAN
Unit: h
Power Utility | Power Outage Duration | Power Outage Users | Power Outage Times | 01 | 02 | 03 | 04 | 05 | 06
test1 | 776.38 | 6 | 106 | 0 | 99.15 | 676.50 | 0.73 | 0 | 0
Pilot Project | 55.40 | 8 | 282 | 0 | 0 | 46.67 | 8.41 | 0.32 | 0
TEST_TRY | 257.87 | 21 | 196 | 0 | 0 | 0 | 119.36 | 138.51 | 0

Figure 408 Power Outage Users Chart

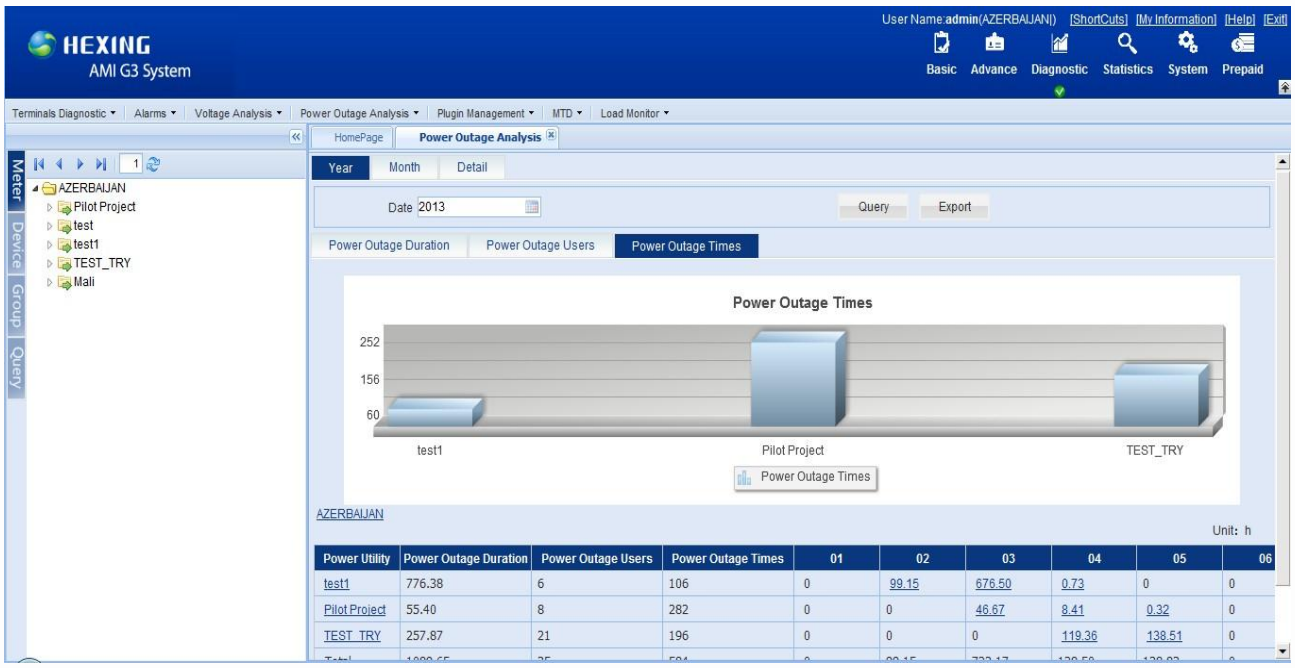

HEXING
AMI G3 System
User Name:admin(AZERBAIJAN|) [ShortCuts] [My Information] [Help] [Exit]
Basic Advance Diagnostic Statistics System Prepaid
Terminals Diagnostic Alarms Voltage Analysis Power Outage Analysis Plugin Management MTD Load Monitor
HomePage Power Outage Analysis
Meter Device Group Query
AZERBAIJAN
Pilot Project
test
test1
TEST_TRY
Mali
Year Month Detail
Date 2013
Query Export
Power Outage Duration Power Outage Users Power Outage Times
Power Outage Times
252
156
60
test1
Pilot Project
TEST_TRY
Power Outage Times
AZERBAIJAN
Unit: h
Power Utility | Power Outage Duration | Power Outage Users | Power Outage Times | 01 | 02 | 03 | 04 | 05 | 06
test1 | 776.38 | 6 | 106 | 0 | 99.15 | 676.50 | 0.73 | 0 | 0
Pilot Project | 55.40 | 8 | 282 | 0 | 0 | 46.67 | 8.41 | 0.32 | 0
TEST_TRY | 257.87 | 21 | 196 | 0 | 0 | 0 | 119.36 | 138.51 | 0

Figure 409 Power Outage Times Chart

If you select “Year” in TAB page, then you can click the link of one specific month in the 12 months to check the power outage information of this month.

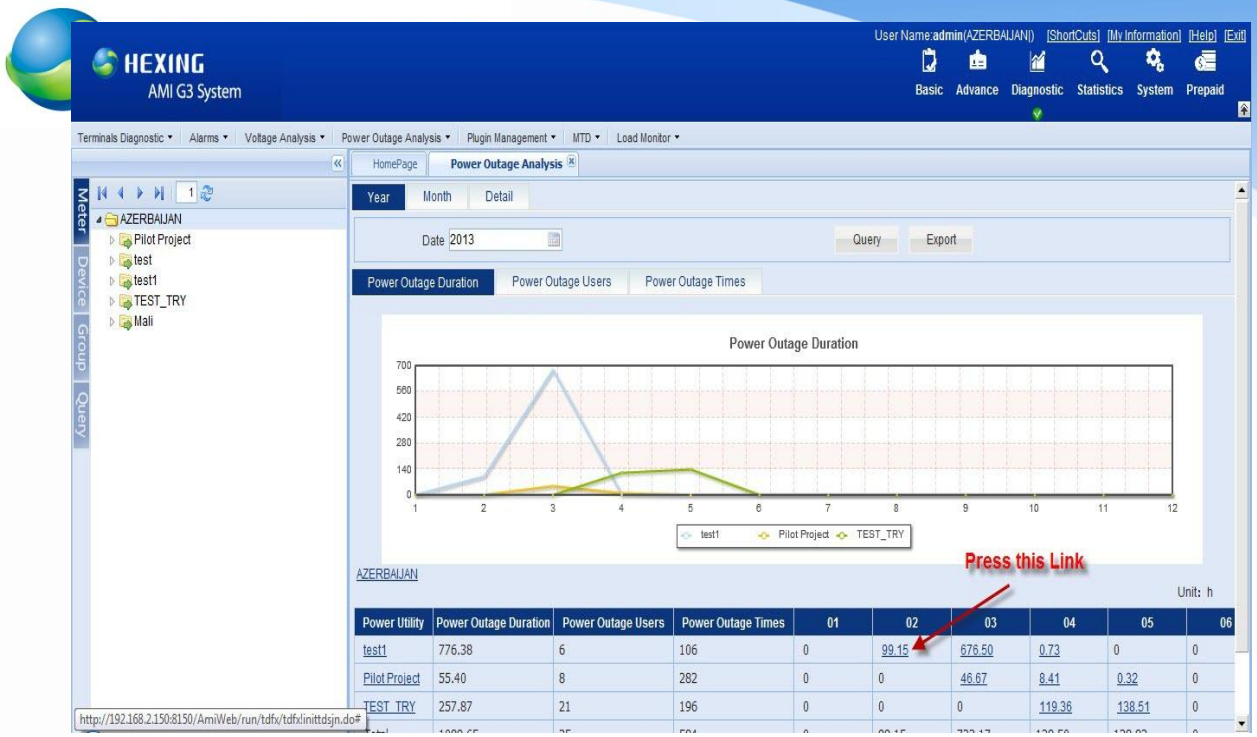

HEXING
AMI G3 System
User Name:admin(AZERBAIJAN) [ShortCuts] [My Information] [Help] [Exit]
Basic Advance Diagnostic Statistics System Prepaid
Terminals Diagnostic Alarms Voltage Analysis Power Outage Analysis Plugin Management MTD Load Monitor
HomePage Power Outage Analysis
Meter Device Group Query
AZERBAIJAN
Pilot Project
test
test1
TEST_TRY
Mali
Year Month Detail
Date 2013
Query Export
Power Outage Duration Power Outage Users Power Outage Times
Power Outage Duration
test1 Pilot Project TEST_TRY
Press this Link
AZERBAIJAN
Unit: h
Power Utility | Power Outage Duration | Power Outage Users | Power Outage Times | 01 | 02 | 03 | 04 | 05 | 06
test1 | 776.38 | 6 | 106 | 0 | 99.15 | 676.50 | 0.73 | 0 | 0
Pilot Project | 55.40 | 8 | 282 | 0 | 0 | 46.67 | 8.41 | 0.32 | 0
TEST_TRY | 257.87 | 21 | 196 | 0 | 0 | 0 | 119.36 | 138.51 | 0

Figure 410 Press the link

After clicking the link, the page will shift to the power outage information of that specific month selected.

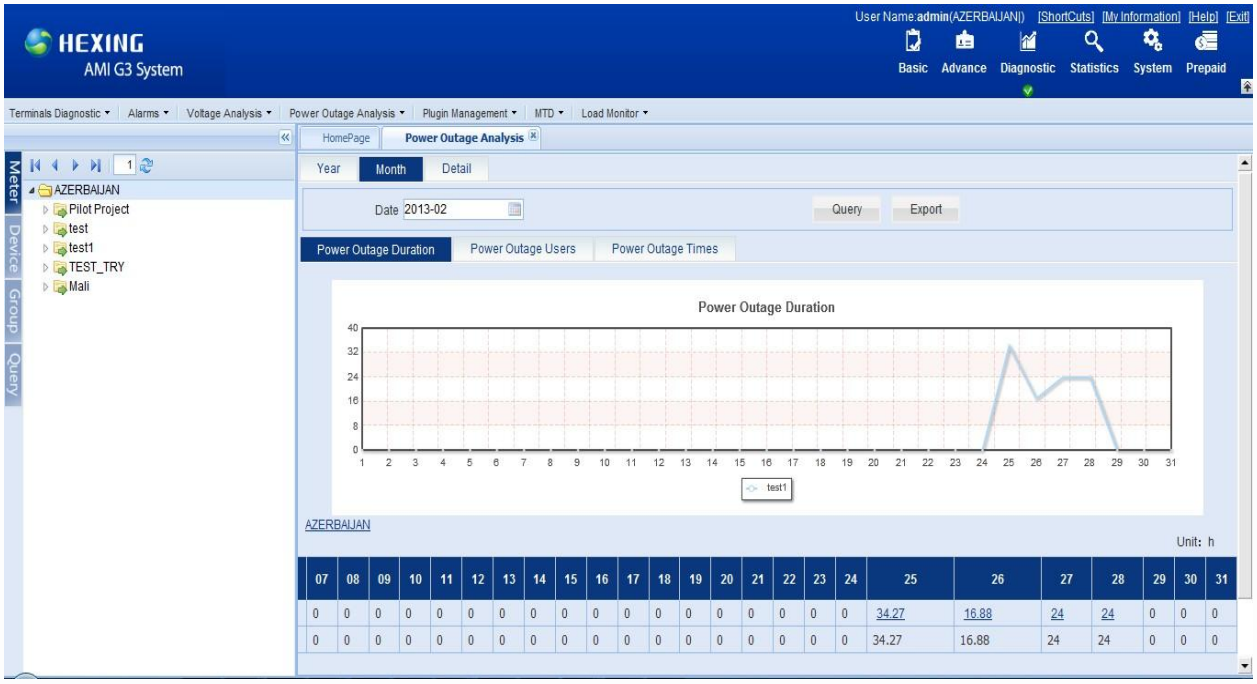

HEXING
AMI G3 System
User Name:admin(AZERBAIJAN) [ShortCuts] [My Information] [Help] [Exit]
Basic Advance Diagnostic Statistics System Prepaid
Terminals Diagnostic Alarms Voltage Analysis Power Outage Analysis Plugin Management MTD Load Monitor
HomePage Power Outage Analysis
Meter Device Group Query
AZERBAIJAN
Pilot Project
test
test1
TEST_TRY
Mali
Year Month Detail
Date 2013-02
Query Export
Power Outage Duration Power Outage Users Power Outage Times
Power Outage Duration
test1
AZERBAIJAN
Unit: h
07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 34.27 16.88 24 24 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 34.27 16.88 24 24 0 0 0

Figure 411 Power outage information of that specific month selected

Click the link of day when power outage happened, then the page will shift to show the power outage information of that specific day.

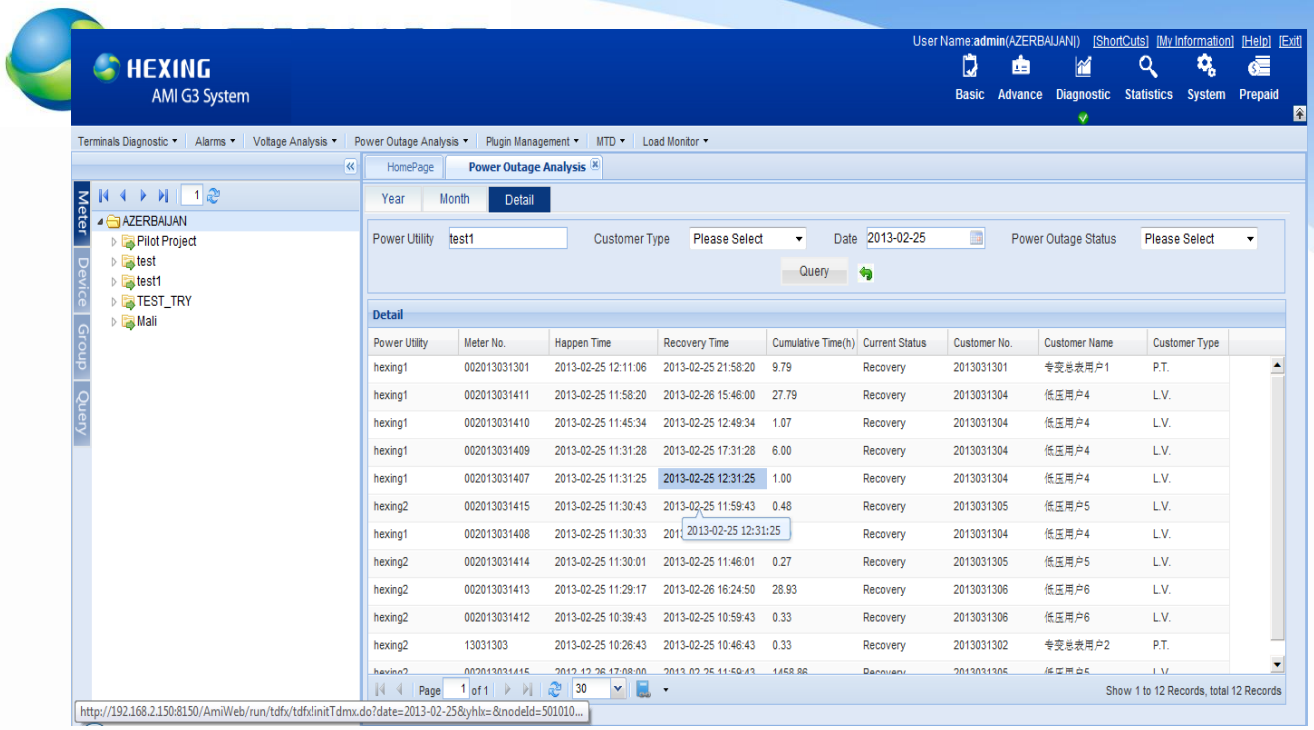

HEXING
AMI G3 System
User Name:admin(AZERBAIJAN) [ShortCuts] [My Information] [Help] [Exit]
Basic Advance Diagnostic Statistics System Prepaid
Terminals Diagnostic Alarms Voltage Analysis Power Outage Analysis Plugin Management MTD Load Monitor
HomePage Power Outage Analysis
Meter Device Group Query
AZERBAIJAN
Pilot Project
test
test1
TEST_TRY
Mali
Year Month Detail
Power Utility test1 Customer Type Please Select Date 2013-02-25 Power Outage Status Please Select
Query
Detail
Power Utility Meter No. Happen Time Recovery Time Cumulative Time(h) Current Status Customer No. Customer Name Customer Type
hexing1 002013031301 2013-02-25 12:11:06 2013-02-25 21:58:20 9.79 Recovery 2013031301 专变总表用户1 P.T.
hexing1 002013031411 2013-02-25 11:58:20 2013-02-26 15:46:00 27.79 Recovery 2013031304 低压用户4 L.V.
hexing1 002013031410 2013-02-25 11:45:34 2013-02-25 12:49:34 1.07 Recovery 2013031304 低压用户4 L.V.
hexing1 002013031409 2013-02-25 11:31:28 2013-02-25 17:31:28 6.00 Recovery 2013031304 低压用户4 L.V.
hexing1 002013031407 2013-02-25 11:31:25 2013-02-25 12:31:25 1.00 Recovery 2013031304 低压用户4 L.V.
hexing2 002013031415 2013-02-25 11:30:43 2013-02-25 11:59:43 0.48 Recovery 2013031305 低压用户5 L.V.
hexing1 002013031408 2013-02-25 11:30:33 2013-02-25 12:31:25 Recovery 2013031304 低压用户4 L.V.
hexing2 002013031414 2013-02-25 11:30:01 2013-02-25 11:46:01 0.27 Recovery 2013031305 低压用户5 L.V.
hexing2 002013031413 2013-02-25 11:29:17 2013-02-26 16:24:50 28.93 Recovery 2013031306 低压用户6 L.V.
hexing2 002013031412 2013-02-25 10:39:43 2013-02-25 10:59:43 0.33 Recovery 2013031306 低压用户6 L.V.
hexing2 13031303 2013-02-25 10:26:43 2013-02-25 10:46:43 0.33 Recovery 2013031302 专变总表用户2 P.T.
Page 1 of 1 30
Show 1 to 12 Records, total 12 Records
http://192.168.2.150:8150/AmiWeb/run/tdfx/tdfxInitTdmx.do?date=2013-02-25&yhlx=&nodeId=501010...

Figure 412 Power outage information of one specific day

Thru “Year” and “Month” at TAB page, you can check the power outage information of the subordinate units of a specific Power Utility.

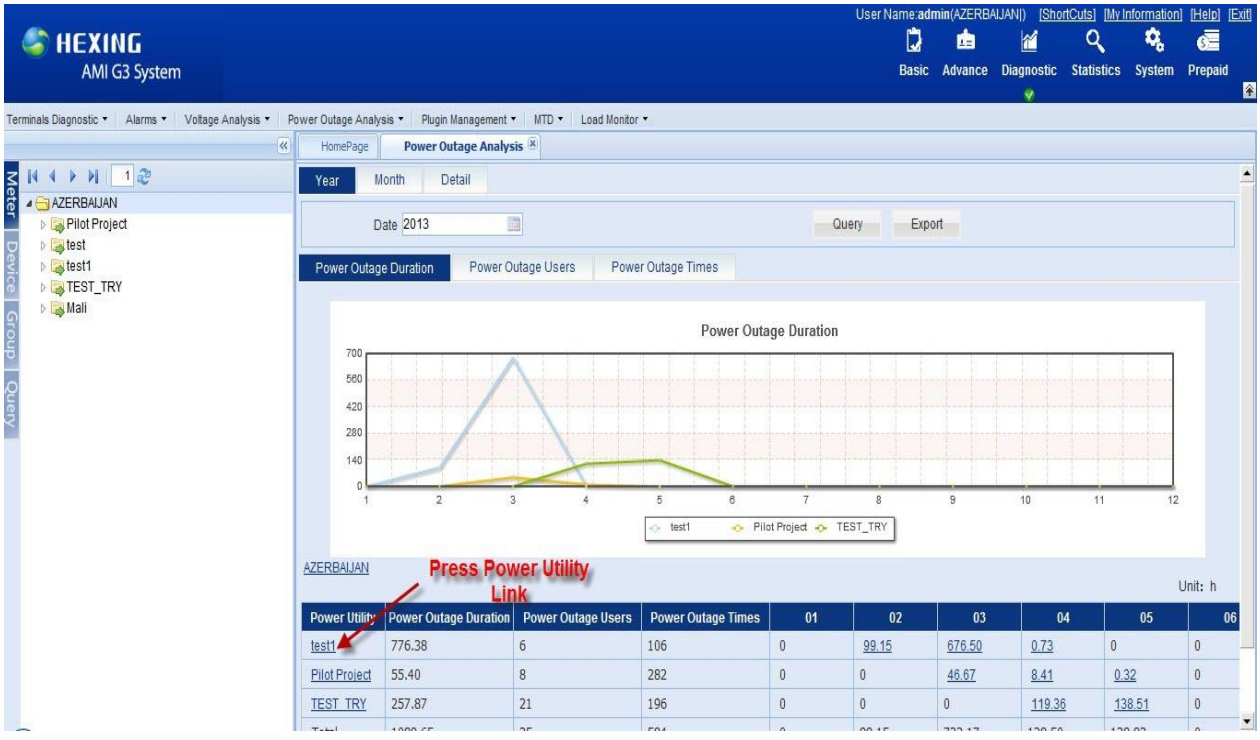

HEXING
AMI G3 System
User Name:admin(AZERBAIJAN) [ShortCuts] [My Information] [Help] [Exit]
Basic Advance Diagnostic Statistics System Prepaid
Terminals Diagnostic Alarms Voltage Analysis Power Outage Analysis Plugin Management MTD Load Monitor
HomePage Power Outage Analysis
Meter Device Group Query
AZERBAIJAN
Pilot Project
test
test1
TEST_TRY
Mali
Year Month Detail
Date 2013 Query Export
Power Outage Duration Power Outage Users Power Outage Times
Power Outage Duration
700
560
420
280
140
0
1 2 3 4 5 6 7 8 9 10 11 12
test1 Pilot Project TEST_TRY
AZERBAIJAN
Press Power Utility Link
Unit: h
Power Utility Power Outage Duration Power Outage Users Power Outage Times 01 02 03 04 05 06
test1 776.38 6 106 0 99.15 676.50 0.73 0 0
Pilot Project 55.40 8 282 0 0 46.67 8.41 0.32 0
TEST_TRY 257.87 21 196 0 0 0 119.36 138.51 0

Figure 413 Press Power Utility Link

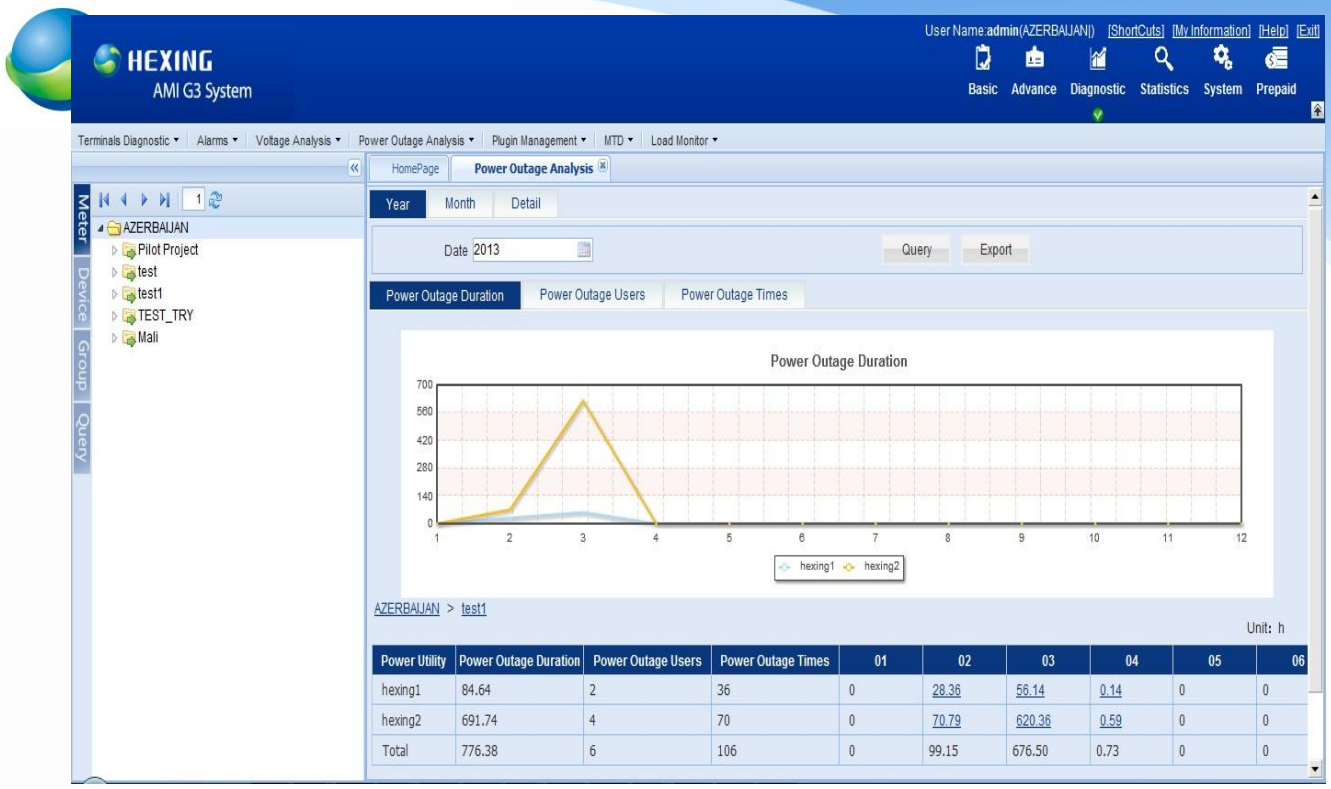

HEXING
AMI G3 System
User Name:admin(AZERBAIJAN) [ShortCuts] [My Information] [Help] [Exit]
Basic Advance Diagnostic Statistics System Prepaid
Terminals Diagnostic Alarms Voltage Analysis Power Outage Analysis Plugin Management MTD Load Monitor
HomePage Power Outage Analysis
Meter Device Group Query
AZERBAIJAN
Pilot Project
test
test1
TEST_TRY
Mali
Year Month Detail
Date 2013
Query Export
Power Outage Duration Power Outage Users Power Outage Times
Power Outage Duration
700 560 420 280 140 0
1 2 3 4 5 6 7 8 9 10 11 12
hexing1 hexing2
AZERBAIJAN > test1
Unit: h
Power Utility | Power Outage Duration | Power Outage Users | Power Outage Times | 01 | 02 | 03 | 04 | 05 | 06
hexing1 | 84.64 | 2 | 36 | 0 | 28.36 | 56.14 | 0.14 | 0 | 0
hexing2 | 691.74 | 4 | 70 | 0 | 70.79 | 620.36 | 0.59 | 0 | 0
Total | 776.38 | 6 | 106 | 0 | 99.15 | 676.50 | 0.73 | 0 | 0

Figure 414 Power Outage Information of the Subordinate Units

21.2. Electric Power Reliability Indices

[Menu] Diagnostic>Power Outage Analysis>Electric Power Reliability Indices

[Function] this is for analyzing the power outage reliability indices of all the terminals of the Power Utility.

[Step]
Click the menu “Power Outage Analysis” to enter the initialization interface of “Electric Power Reliability Indices”.

Select “Year” or “Month” at TAB page, then select one specific year or month in the “Date” column to check the power outage reliability indices of terminal during one year and one month respectively;

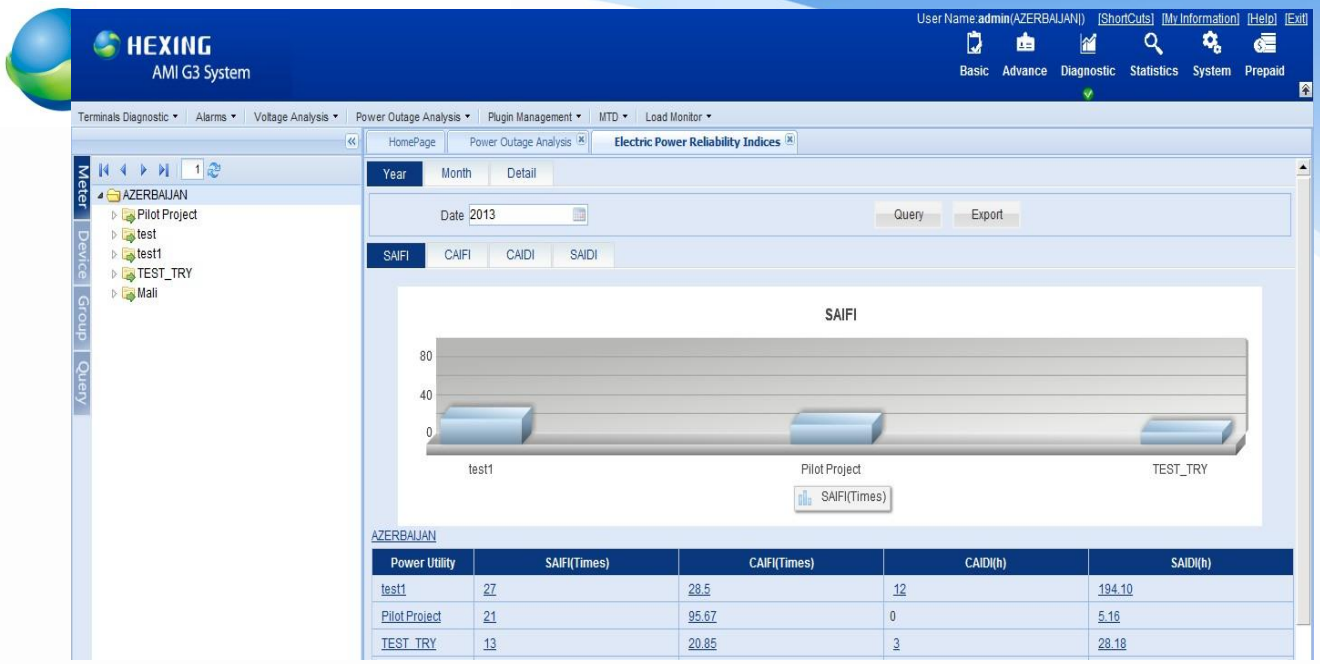


Figure 415 Power outage reliability indices during one year

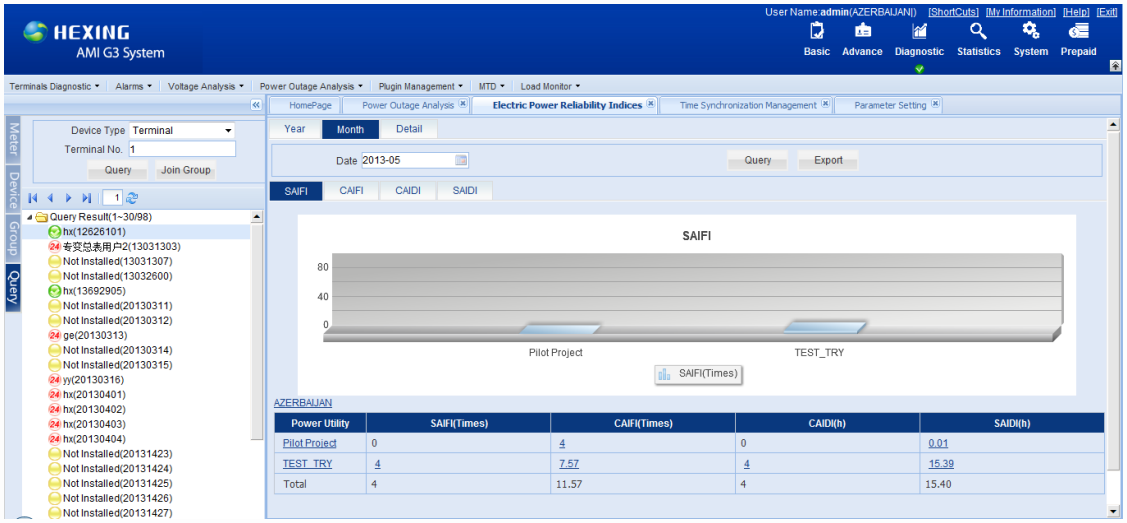


Figure 416 Power outage reliability indices during one month

Click “Detail” at TAB page, select one Power Utility node, consumer type, power outage status, and the specific Year or Month, then you can check the detailed information of power outage of the terminal during one specific year or month.

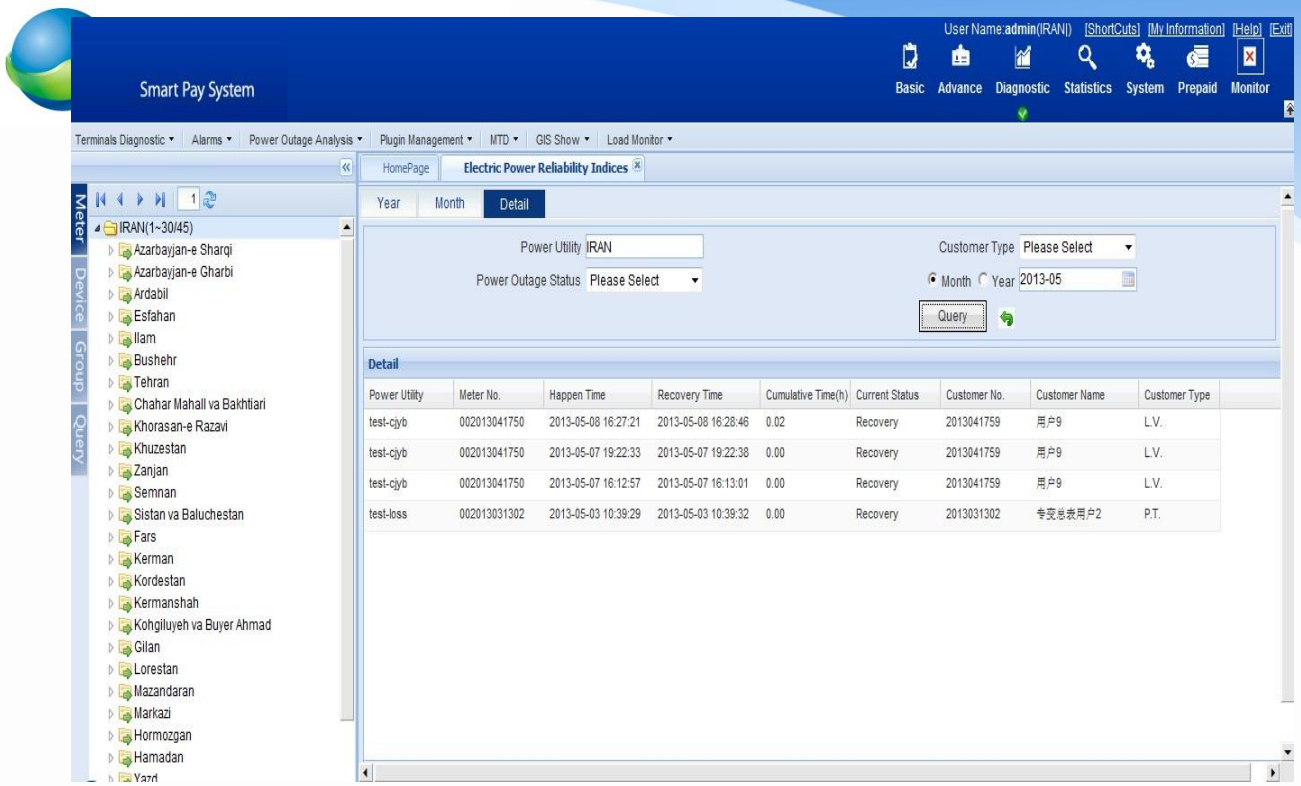


Figure 417 Power outage conditions during one month

Select the items “SAIFI, CAIFI, CAIDI, SAIDI” at the TAB page to view the relevant chart.

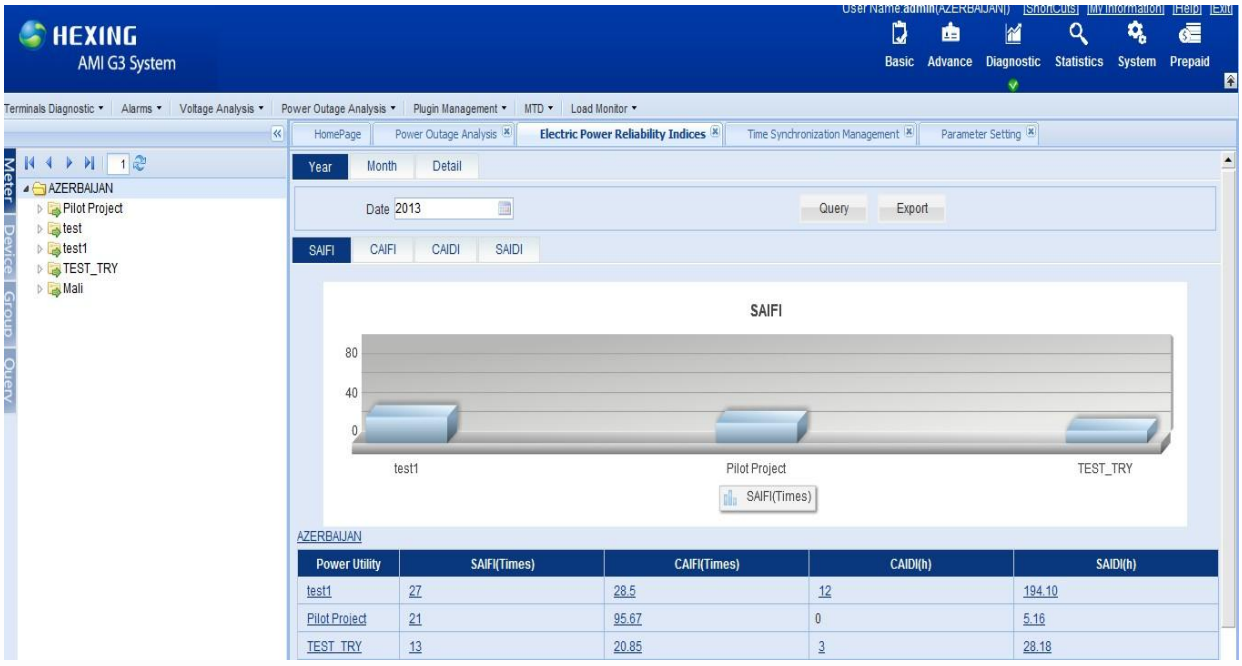


Figure 418 SAIFI

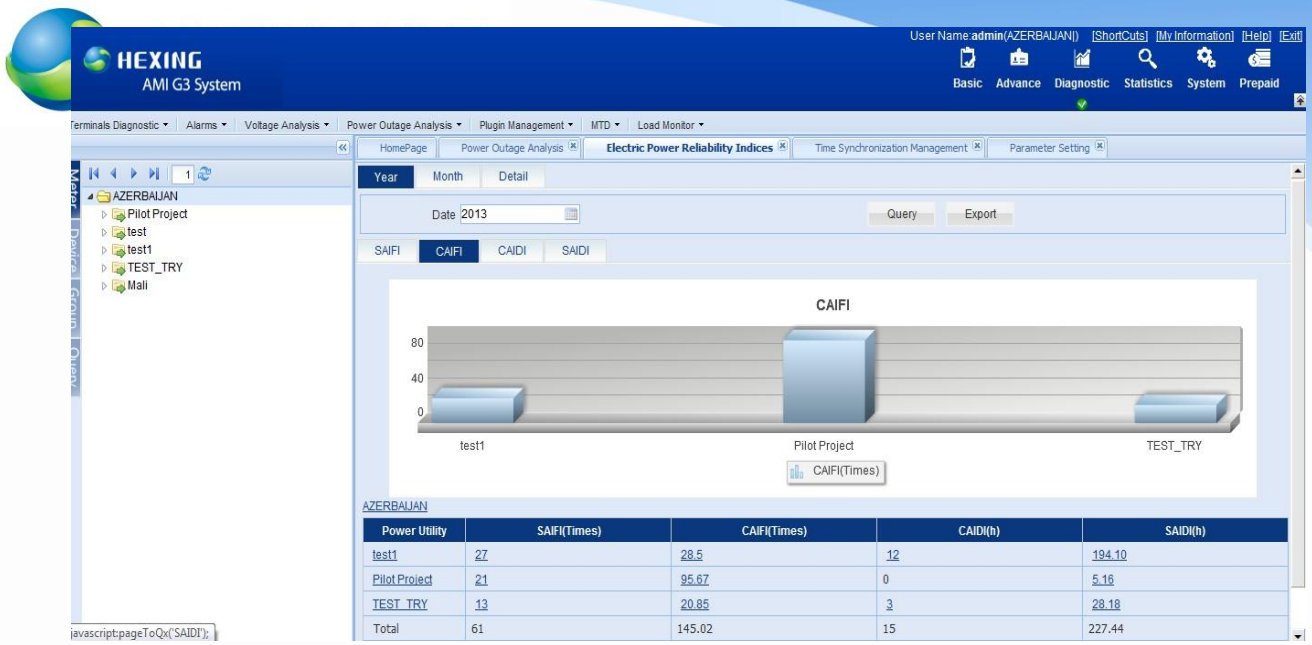


Figure 419 CAIFI

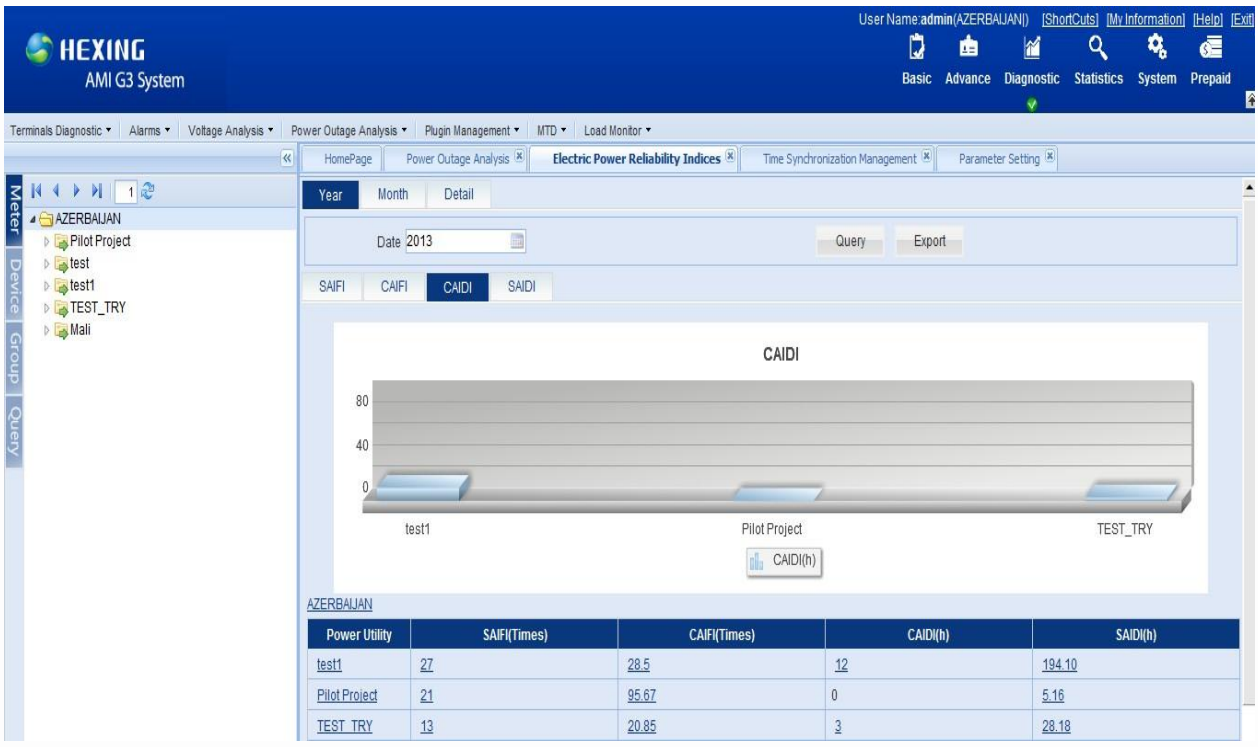


Figure 420 CAIDI

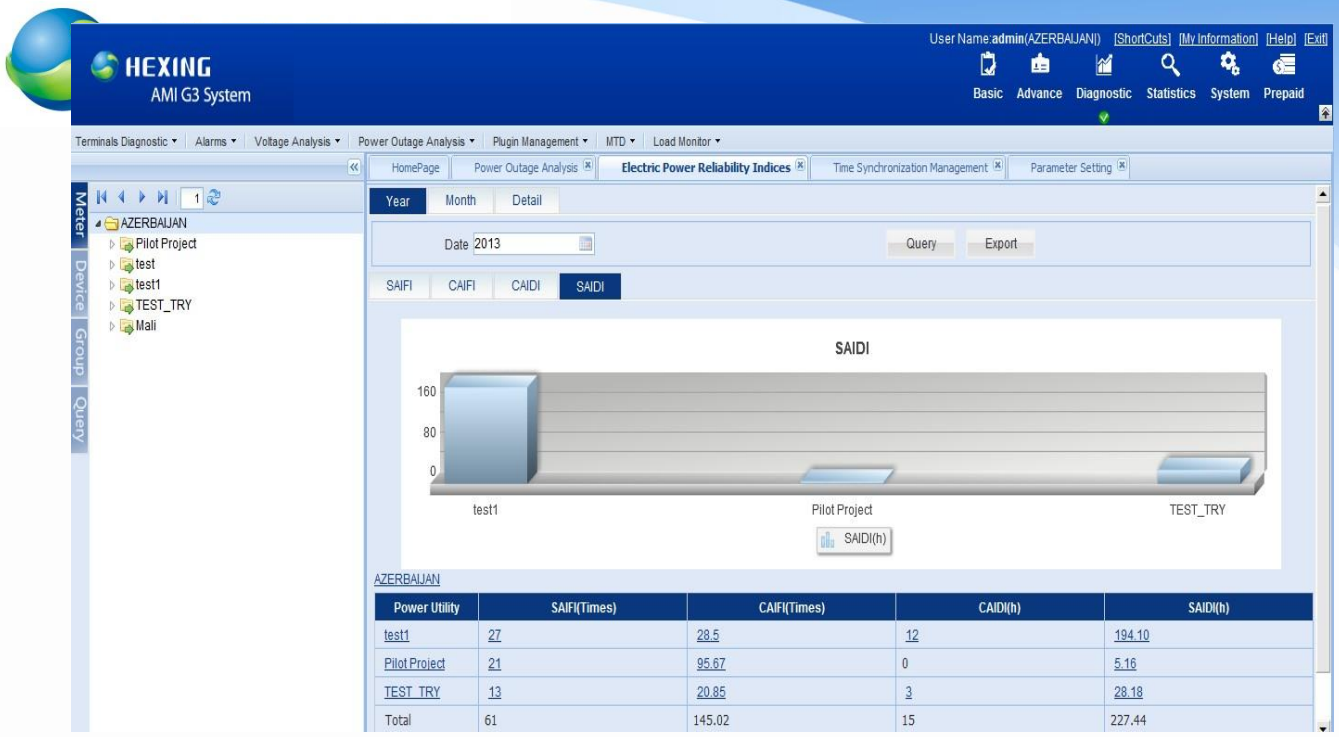


Figure 4214 SAIDI

Click the link of "SAIFI, CAIFI, CAIDI, SAIFI", then the interface will shift to show the detailed power outage information of the selected Year or Month.

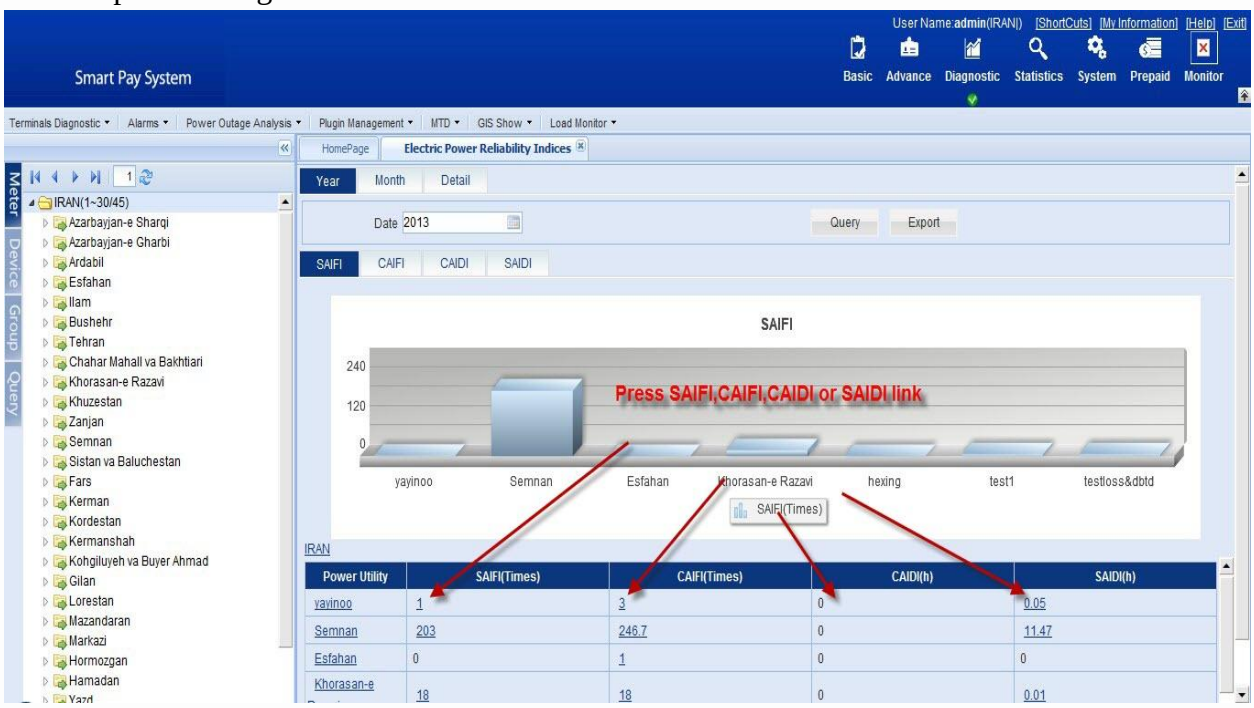


Figure 4225 Press Link

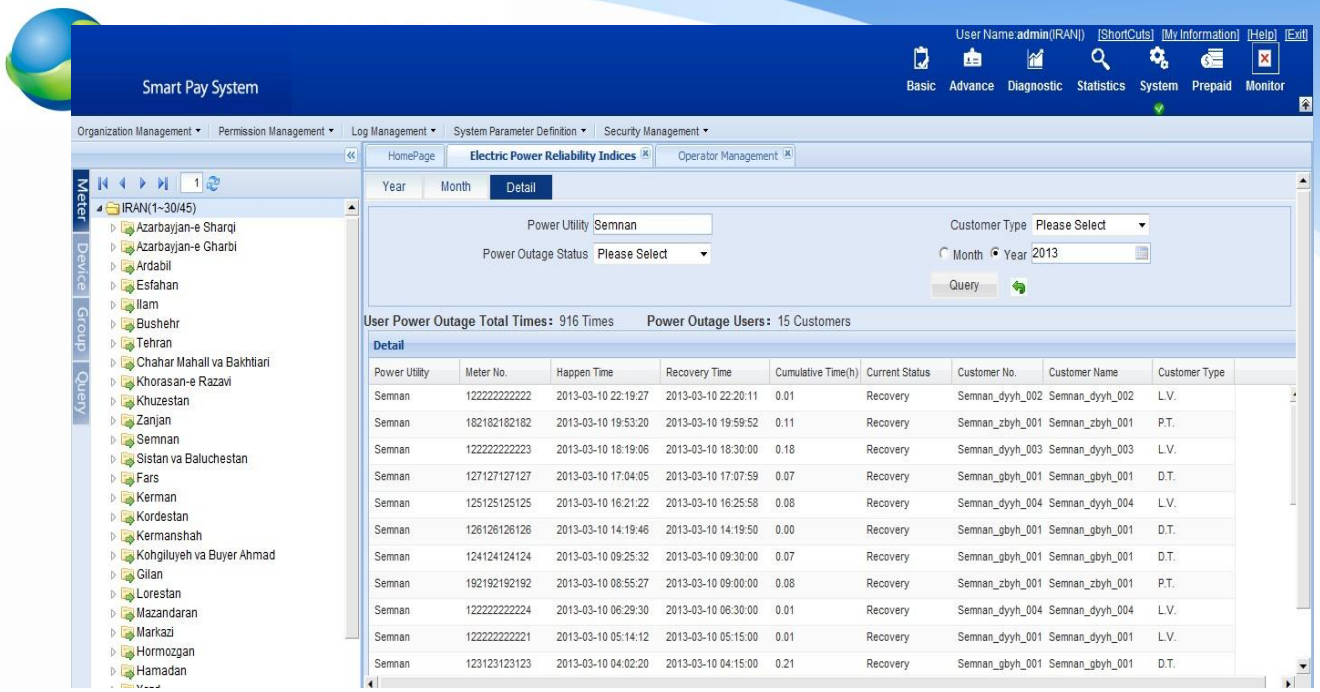

Smart Pay System
User Name:admin(IRAN)) [ShortCuts] [My Information] [Help] [Exit]
Basic Advance Diagnostic Statistics System Prepaid Monitor
Organization Management Permission Management Log Management System Parameter Definition Security Management
HomePage Electric Power Reliability Indices Operator Management
Meter Device Group Query
IRAN(1~30/45)
Azarbayjan-e Sharqi
Azarbayjan-e Gharbi
Ardabil
Esfahan
Ilam
Bushehr
Tehran
Chahar Mahall va Bakhtiari
Khorasan-e Razavi
Khuzestan
Zanjan
Semnan
Sistan va Baluchestan
Fars
Kerman
Kordestan
Kermanshah
Kohgiluyeh va Buyer Ahmad
Gilan
Lorestan
Mazandaran
Markazi
Hormozgan
Hamadan
Year Month Detail
Power Utility Semnan
Power Outage Status Please Select
Customer Type Please Select
Month Year 2013
Query
User Power Outage Total Times: 916 Times
Power Outage Users: 15 Customers
Detail
Power Utility | Meter No. | Happen Time | Recovery Time | Cumulative Time(h) | Current Status | Customer No. | Customer Name | Customer Type
Semnan | 122222222222 | 2013-03-10 22:19:27 | 2013-03-10 22:20:11 | 0.01 | Recovery | Semnan_dyyh_002 | Semnan_dyyh_002 | L.V.
Semnan | 182182182182 | 2013-03-10 19:53:20 | 2013-03-10 19:59:52 | 0.11 | Recovery | Semnan_zbyh_001 | Semnan_zbyh_001 | P.T.
Semnan | 122222222223 | 2013-03-10 18:19:06 | 2013-03-10 18:30:00 | 0.18 | Recovery | Semnan_dyyh_003 | Semnan_dyyh_003 | L.V.
Semnan | 127127127127 | 2013-03-10 17:04:05 | 2013-03-10 17:07:59 | 0.07 | Recovery | Semnan_gbyh_001 | Semnan_gbyh_001 | D.T.
Semnan | 125125125125 | 2013-03-10 16:21:22 | 2013-03-10 16:25:58 | 0.08 | Recovery | Semnan_dyyh_004 | Semnan_dyyh_004 | L.V.
Semnan | 126126126126 | 2013-03-10 14:19:46 | 2013-03-10 14:19:50 | 0.00 | Recovery | Semnan_gbyh_001 | Semnan_gbyh_001 | D.T.
Semnan | 124124124124 | 2013-03-10 09:25:32 | 2013-03-10 09:30:00 | 0.07 | Recovery | Semnan_gbyh_001 | Semnan_gbyh_001 | D.T.
Semnan | 192192192192 | 2013-03-10 08:55:27 | 2013-03-10 09:00:00 | 0.08 | Recovery | Semnan_zbyh_001 | Semnan_zbyh_001 | P.T.
Semnan | 122222222224 | 2013-03-10 06:29:30 | 2013-03-10 06:30:00 | 0.01 | Recovery | Semnan_dyyh_004 | Semnan_dyyh_004 | L.V.
Semnan | 122222222221 | 2013-03-10 05:14:12 | 2013-03-10 05:15:00 | 0.01 | Recovery | Semnan_dyyh_001 | Semnan_dyyh_001 | L.V.
Semnan | 123123123123 | 2013-03-10 04:02:20 | 2013-03-10 04:15:00 | 0.21 | Recovery | Semnan_gbyh_001 | Semnan_gbyh_001 | D.T.

Figure 4236 Detailed power outage information

Click the Power Utility node to check the power outage reliability indices of its subordinate units.

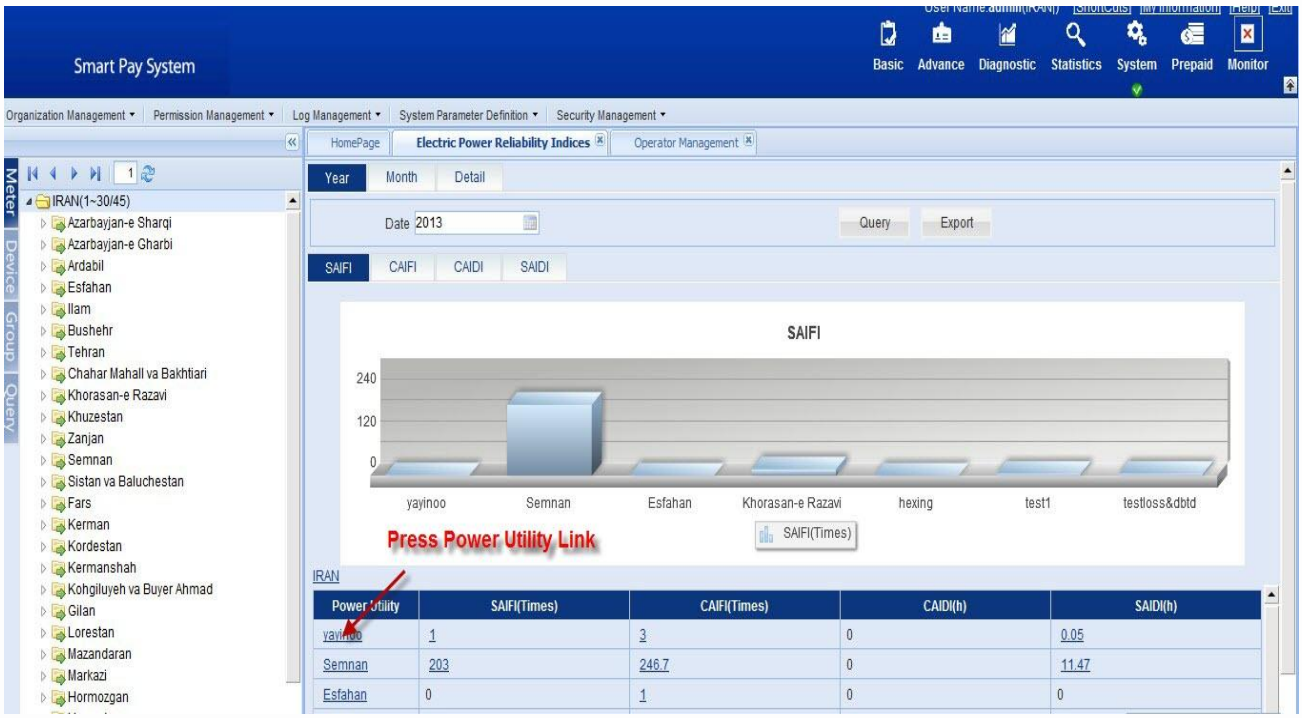


Figure 4247 Press Power Utility Link

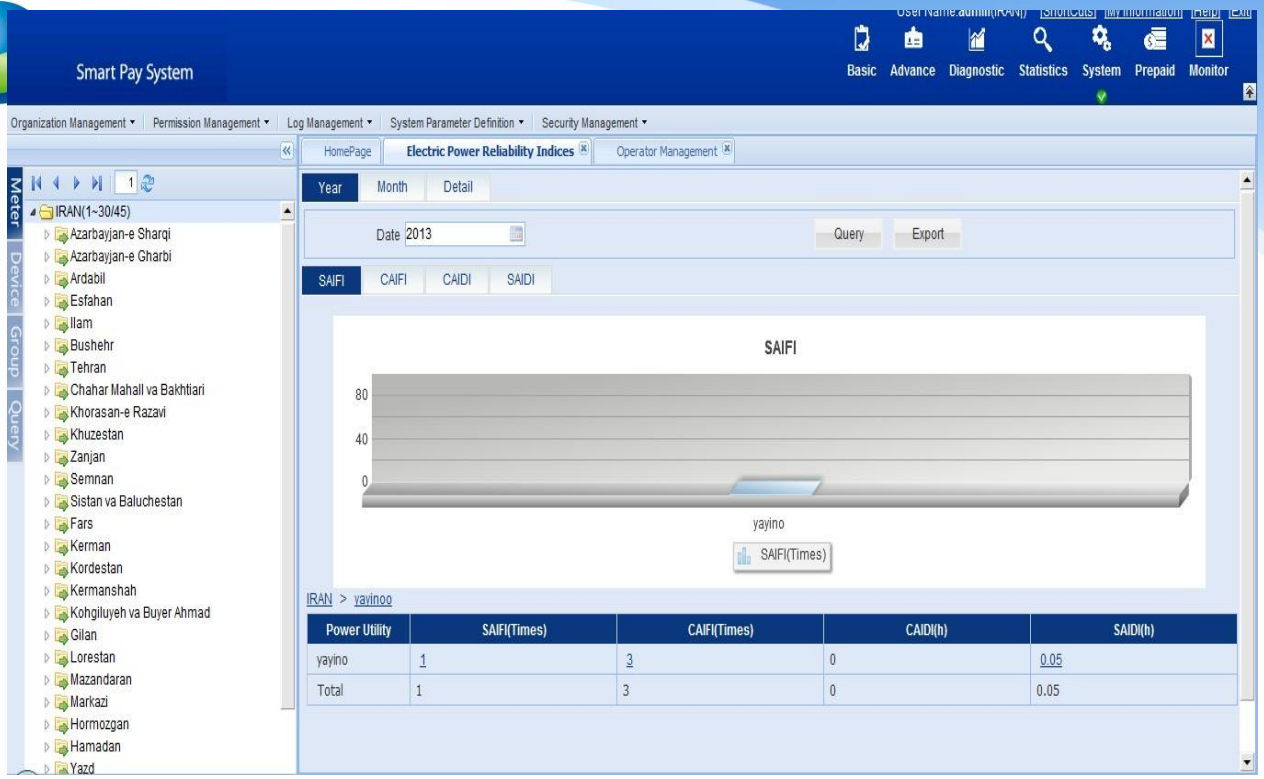


Figure 4258 Power outage reliability indices of subordinate units

Click “Export” button to export the power outage reliability indices data.

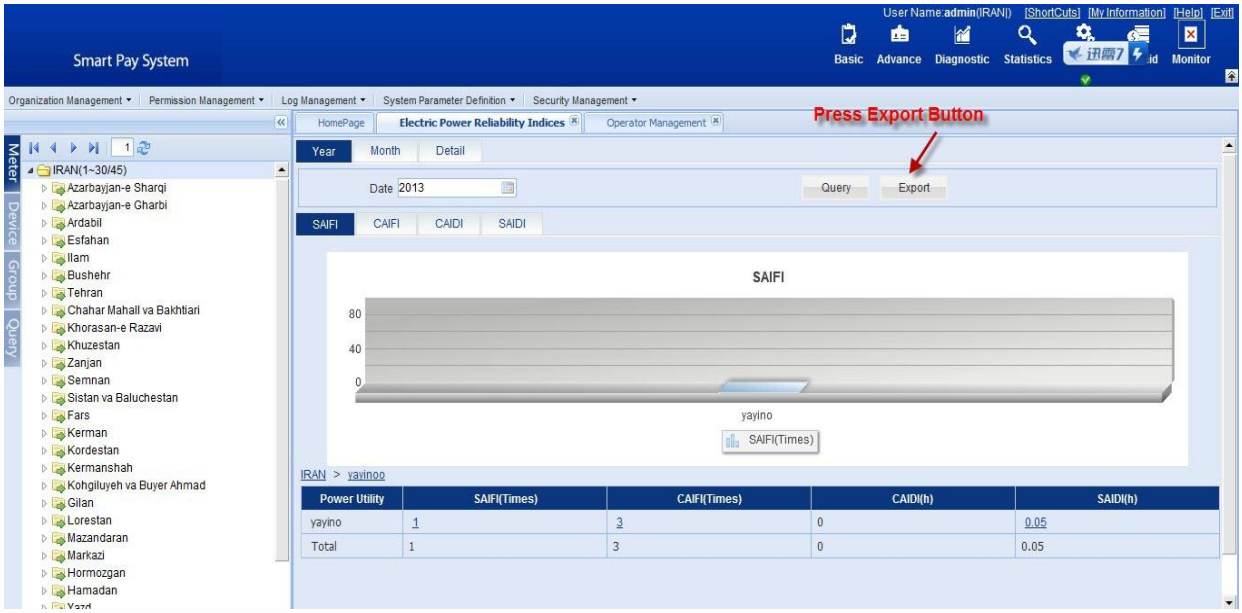


Figure 4269 Export Data

22. Installation Coverage Analysis

22.1. Installation Coverage Analysis

[Menu] Statistic>Installation Coverage >Installation Coverage analysis

[Function] this is for checking the installation coverage information of terminals.

[Step]

Click the menu “Installation Coverage analysis” to enter the initialization interface of “Installation Coverage analysis”. Select the “Installation Coverage Statistics” and “Installation Coverage Detail” button at TAB page to check the installation coverage statistical data and installation coverage detailed information respectively.

At the “Installation Coverage Statistics (PT)” interface, please click the link “Install Rate”, then the system will shift to “Installation Coverage Detail (PT)” interface according to the selected “Install Rate”.

At the “Installation Coverage Statistics (DT)” interface, please click the link “Install Rate”, then the system will shift to “Installation Coverage Detail (DT)” interface according to the selected “Install Rate”.

At the “Installation Coverage Statistics (LV)” interface, please click the link “Coverage Transformer Area” and “Wholly uncovering Transformer Area”, then the system will shift to “Installation Coverage Detail (LV)” interface.

At the “Installation Coverage Statistics” interface, please click the Power Utility node, then you can check the installation coverage information of its subordinate units.

At the “Installation Coverage Statistics” interface, click the “Export” button to export the installation coverage statistical data.

At the “Installation Coverage Detail” interface, click the “Export” button of “Grid” to export the installation coverage detailed information.

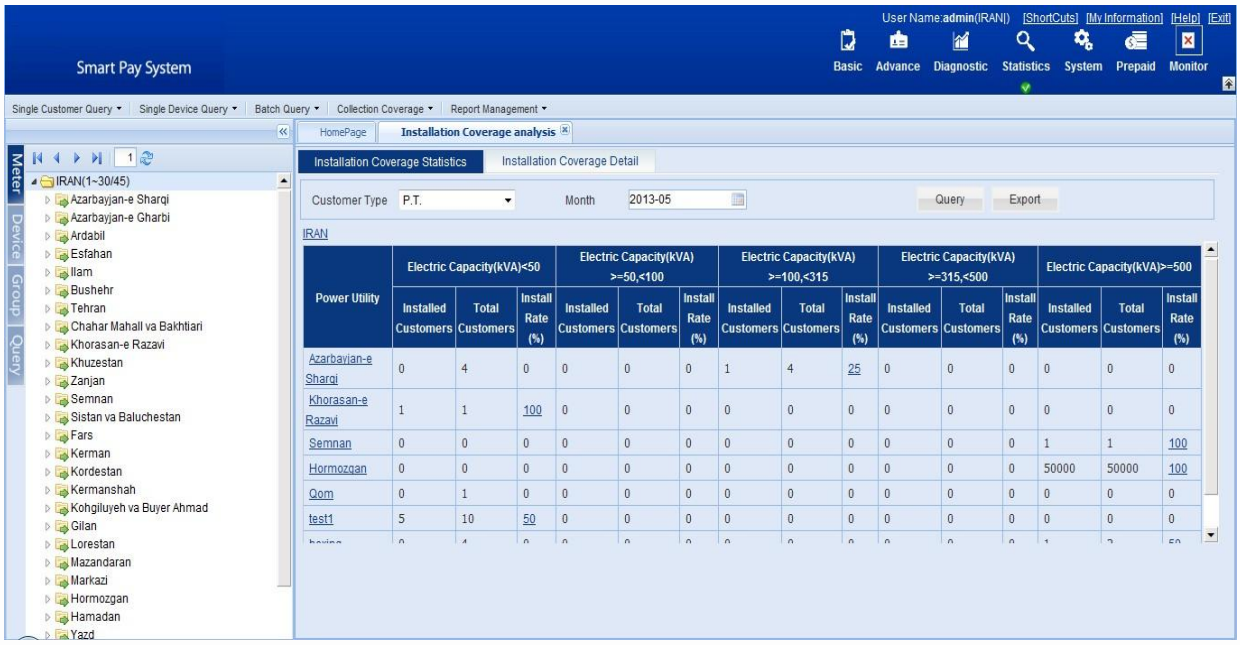


Figure 42730 Installation Coverage Statistics(PT)

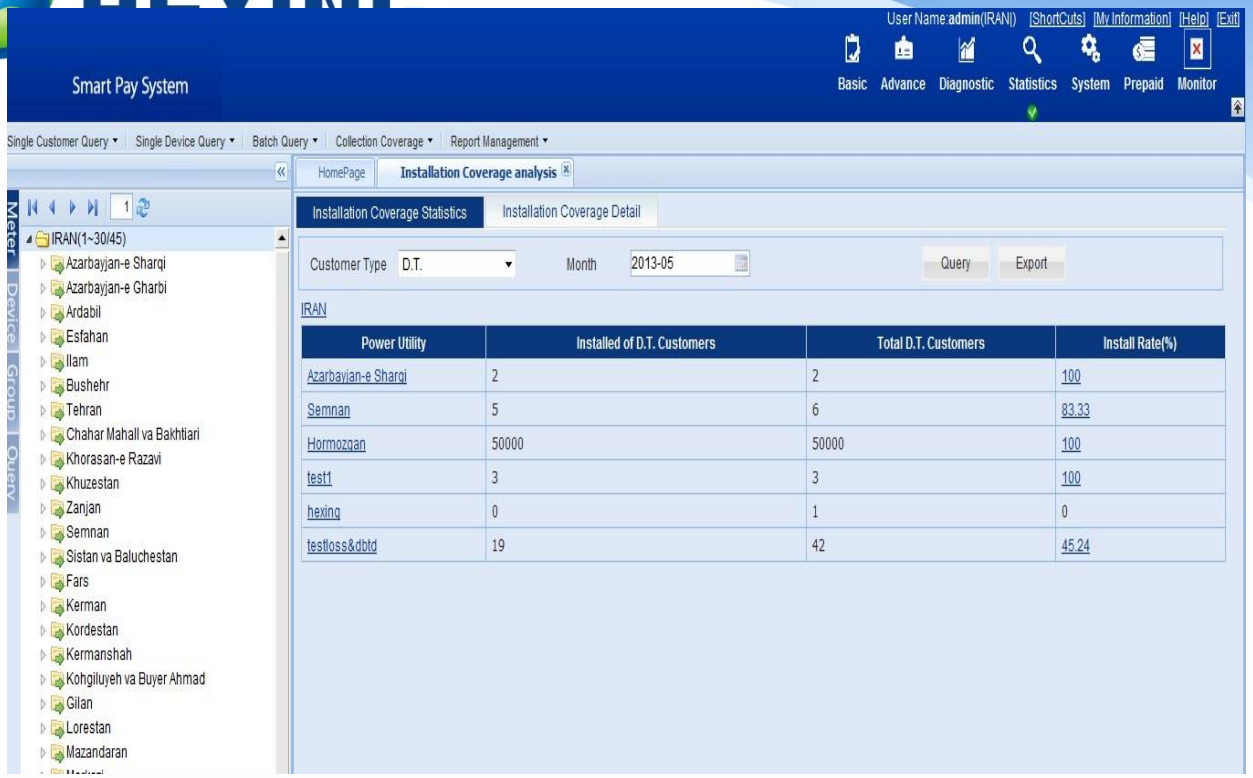


Figure 42831 Installation Coverage Statistics(DT)

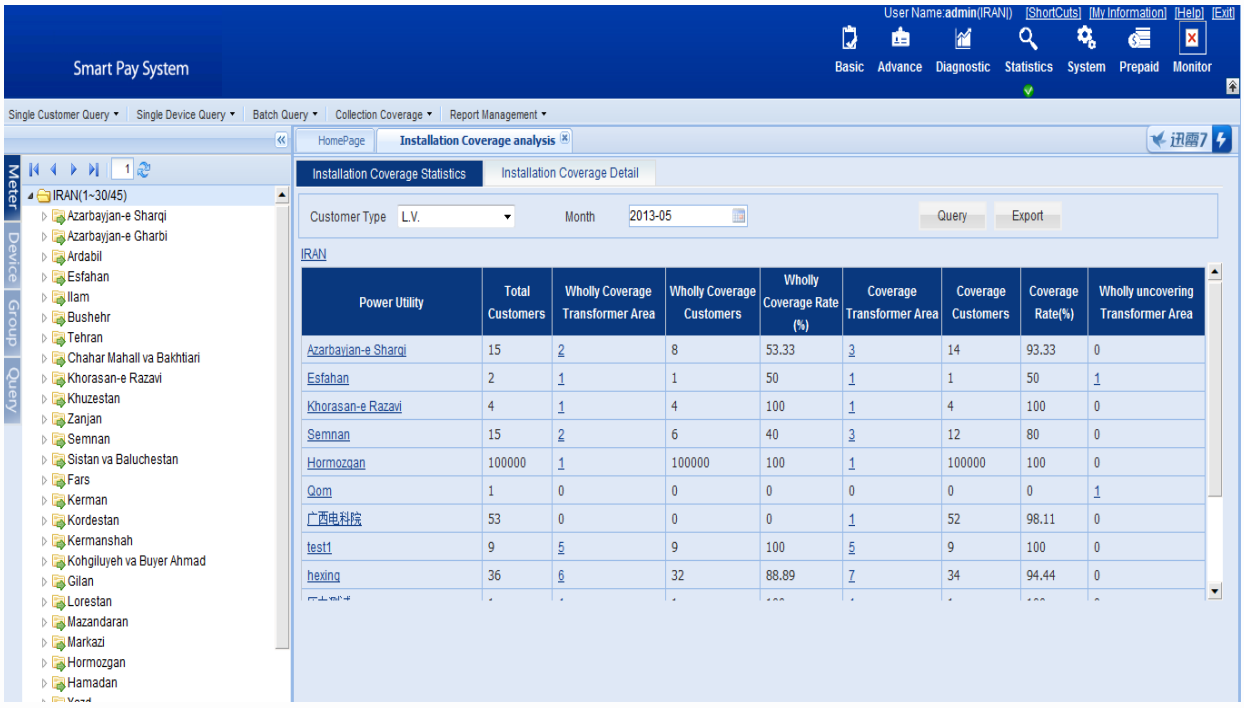

Smart Pay System
User Name:admin(IRAN) [ShortCuts] [My Information] [Help] [Exit]
Basic Advance Diagnostic Statistics System Prepaid Monitor
Single Customer Query | Single Device Query | Batch Query | Collection Coverage | Report Management
HomePage
Installation Coverage analysis
Installation Coverage Statistics
Installation Coverage Detail
Customer Type L.V.
Month 2013-05
Query
Export
IRAN
Power Utility | Total Customers | Wholly Coverage Transformer Area | Wholly Coverage Customers | Wholly Coverage Rate (%) | Coverage Transformer Area | Coverage Customers | Coverage Rate(%) | Wholly uncovering Transformer Area
Azarbayjan-e Sharqi | 15 | 2 | 8 | 53.33 | 3 | 14 | 93.33 | 0
Esfahan | 2 | 1 | 1 | 50 | 1 | 1 | 50 | 1
Khorasan-e Razavi | 4 | 1 | 4 | 100 | 1 | 4 | 100 | 0
Semnan | 15 | 2 | 6 | 40 | 3 | 12 | 80 | 0
Hormozgan | 100000 | 1 | 100000 | 100 | 1 | 100000 | 100 | 0
Qom | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1
广西电科院 | 53 | 0 | 0 | 0 | 1 | 52 | 98.11 | 0
test1 | 9 | 5 | 9 | 100 | 5 | 9 | 100 | 0
hexing | 36 | 6 | 32 | 88.89 | 7 | 34 | 94.44 | 0
IRAN(1~30/45)
Azarbayjan-e Sharqi
Azarbayjan-e Gharbi
Ardabil
Esfahan
Ilam
Bushehr
Tehran
Chahar Mahall va Bakhtiari
Khorasan-e Razavi
Khuzestan
Zanjan
Semnan
Sistan va Baluchestan
Fars
Kerman
Kordestan
Kermanshah
Kohgiluyeh va Buyer Ahmad
Gilan
Lorestan
Mazandaran
Markazi
Hormozgan
Hamadan

Figure 42932 Installation Coverage Statistics(LV)

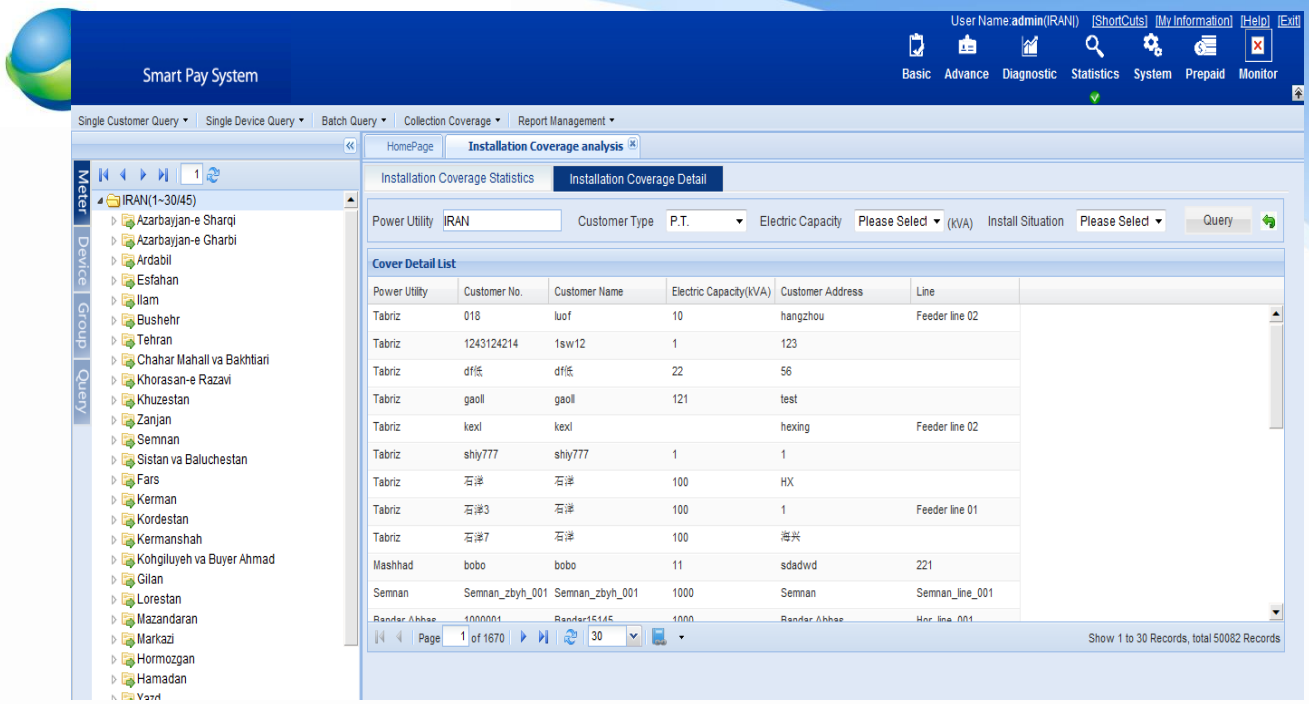


Figure 43033 Installation Coverage Detail (PT)

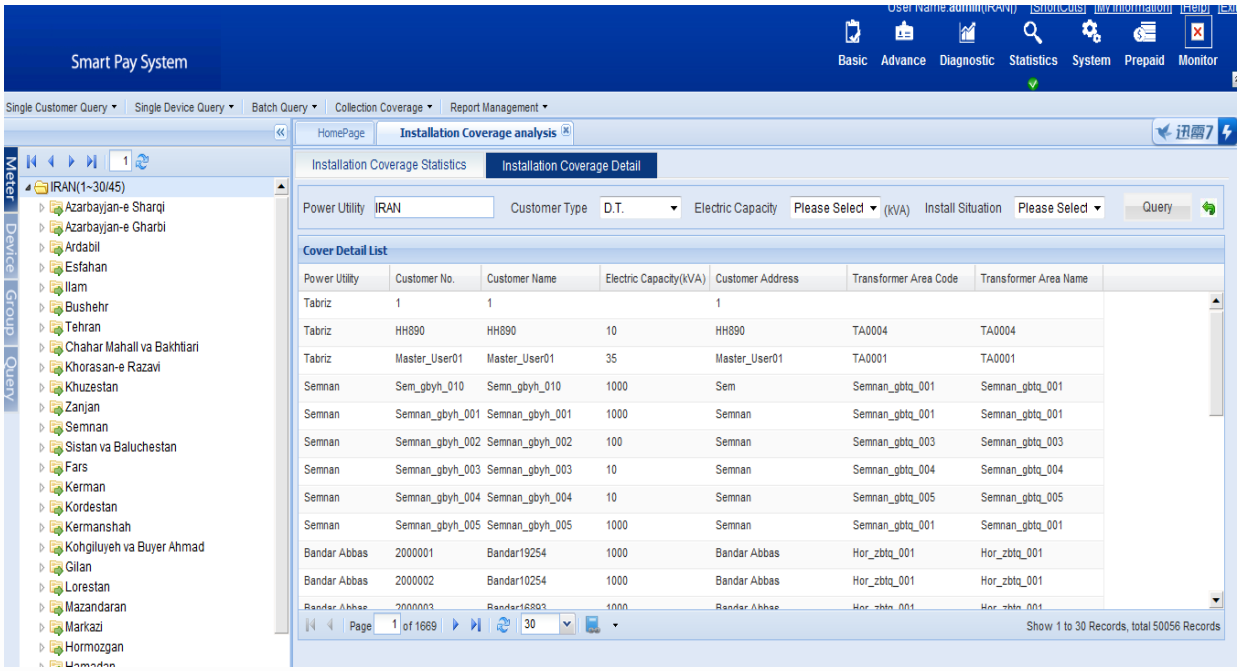


Figure 43134 Installation Coverage Detail (DT)

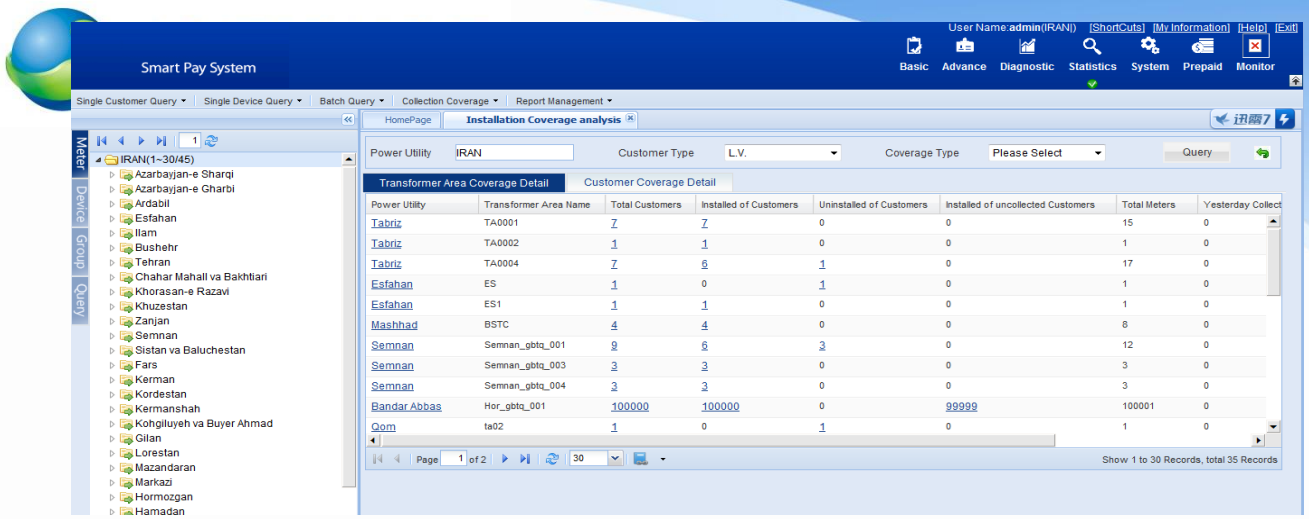

Smart Pay System
User Name:admin(IRAN)) [ShortCuts] [My Information] [Help] [Exit]
Basic Advance Diagnostic Statistics System Prepaid Monitor
Single Customer Query | Single Device Query | Batch Query | Collection Coverage | Report Management
HomePage | Installation Coverage analysis
Power Utility IRAN Customer Type L.V. Coverage Type Please Select Query
Transformer Area Coverage Detail | Customer Coverage Detail
Power Utility | Transformer Area Name | Total Customers | Installed of Customers | Uninstalled of Customers | Installed of uncollected Customers | Total Meters | Yesterday Collect
Tabriz | TA0001 | 7 | 7 | 0 | 0 | 15 | 0
Tabriz | TA0002 | 1 | 1 | 0 | 0 | 1 | 0
Tabriz | TA0004 | 7 | 6 | 1 | 0 | 17 | 0
Esfahan | ES | 1 | 0 | 1 | 0 | 1 | 0
Esfahan | ES1 | 1 | 1 | 0 | 0 | 1 | 0
Mashhad | BSTC | 4 | 4 | 0 | 0 | 8 | 0
Semnan | Semnan_gbtq_001 | 9 | 6 | 3 | 0 | 12 | 0
Semnan | Semnan_gbtq_003 | 3 | 3 | 0 | 0 | 3 | 0
Semnan | Semnan_gbtq_004 | 3 | 3 | 0 | 0 | 3 | 0
Bandar Abbas | Hor_gbtq_001 | 100000 | 100000 | 0 | 99999 | 100001 | 0
Qom | ta02 | 1 | 0 | 1 | 0 | 1 | 0
Page 1 of 2 30
Show 1 to 30 Records, total 35 Records
IRAN(1~30/45)
Azarbayjan-e Sharqi
Azarbayjan-e Gharbi
Ardabil
Esfahan
Ilam
Bushehr
Tehran
Chahar Mahall va Bakhtiari
Khorasan-e Razavi
Khuzestan
Zanjan
Semnan
Sistan va Baluchestan
Fars
Kerman
Kordestan
Kermanshah
Kohgiluyeh va Buyer Ahmad
Gilan
Lorestan
Mazandaran
Markazi
Hormozgan
Hamadan

Figure 43235 Installation Coverage Detail (LV)

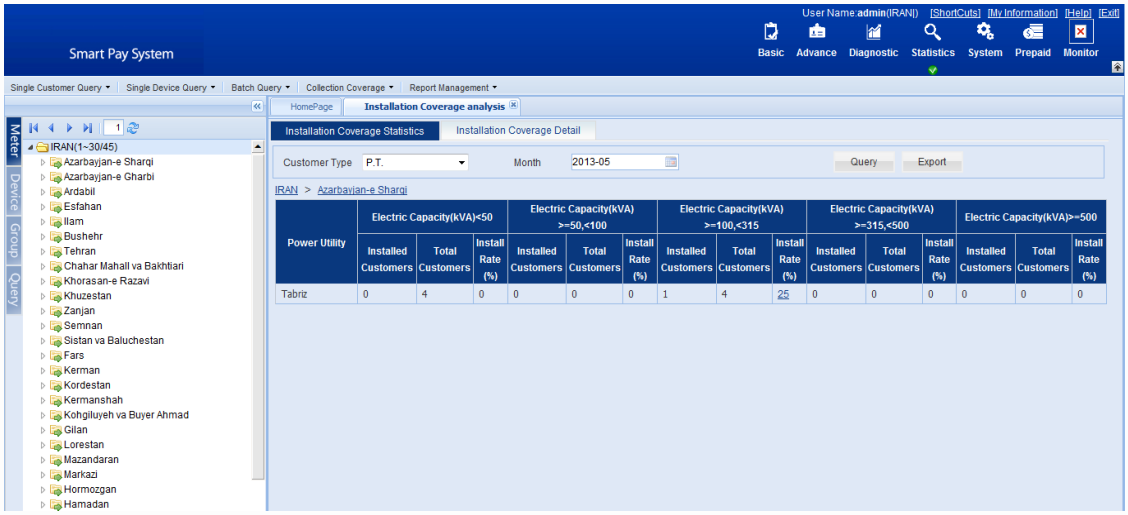


Figure 43336 Installation coverage information of subordinate units(PT)

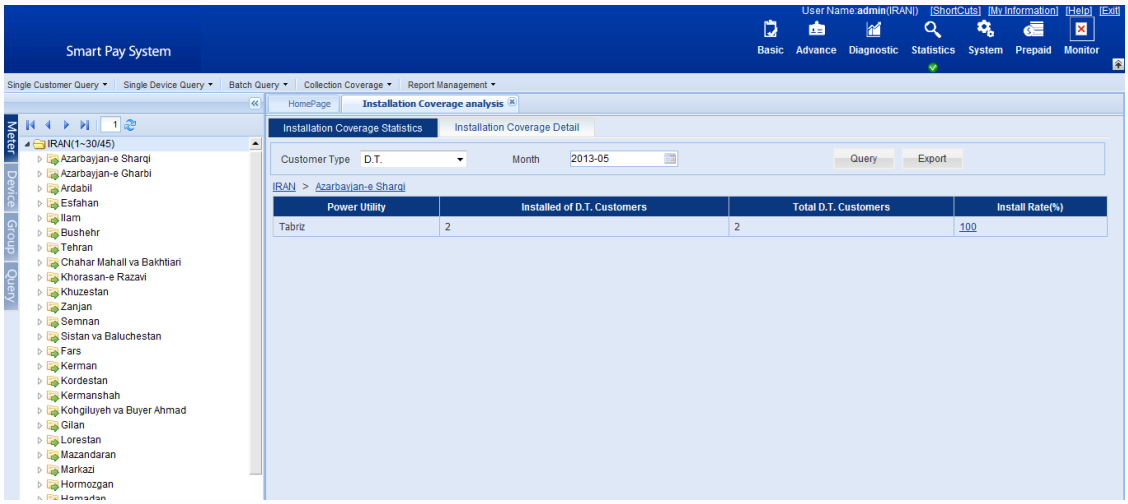


Figure 43437 Installation coverage information of subordinate units(DT)

Figure 43538 Installation coverage information of subordinate units(LV)

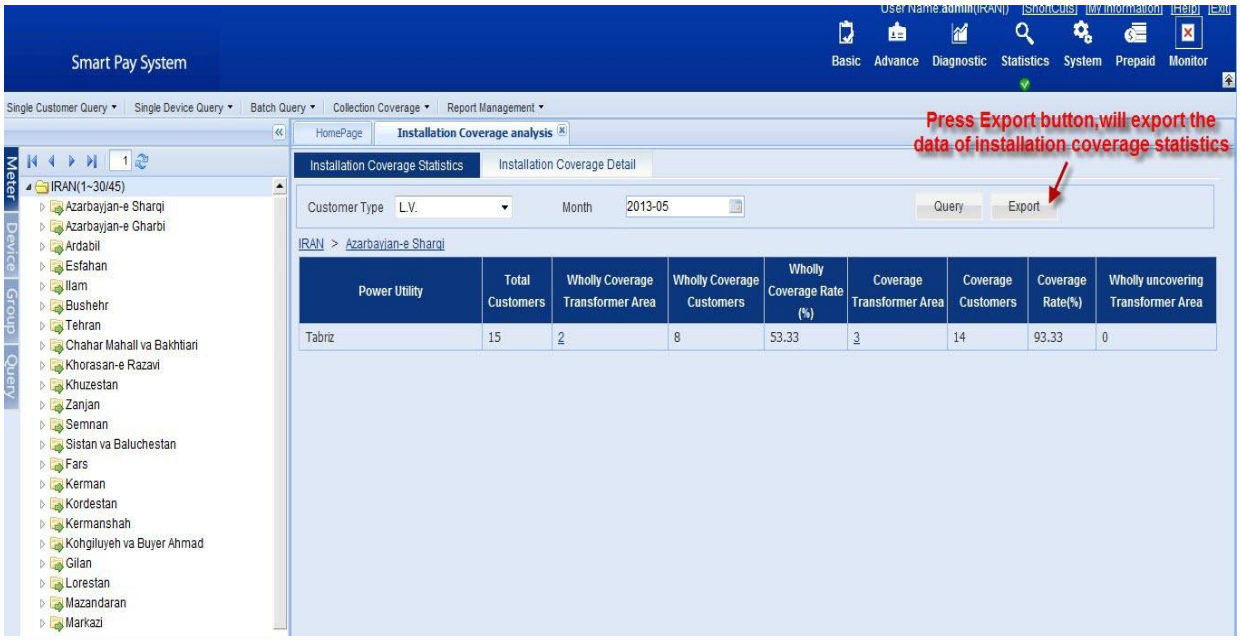


Figure 43639 Export installation coverage statistical data

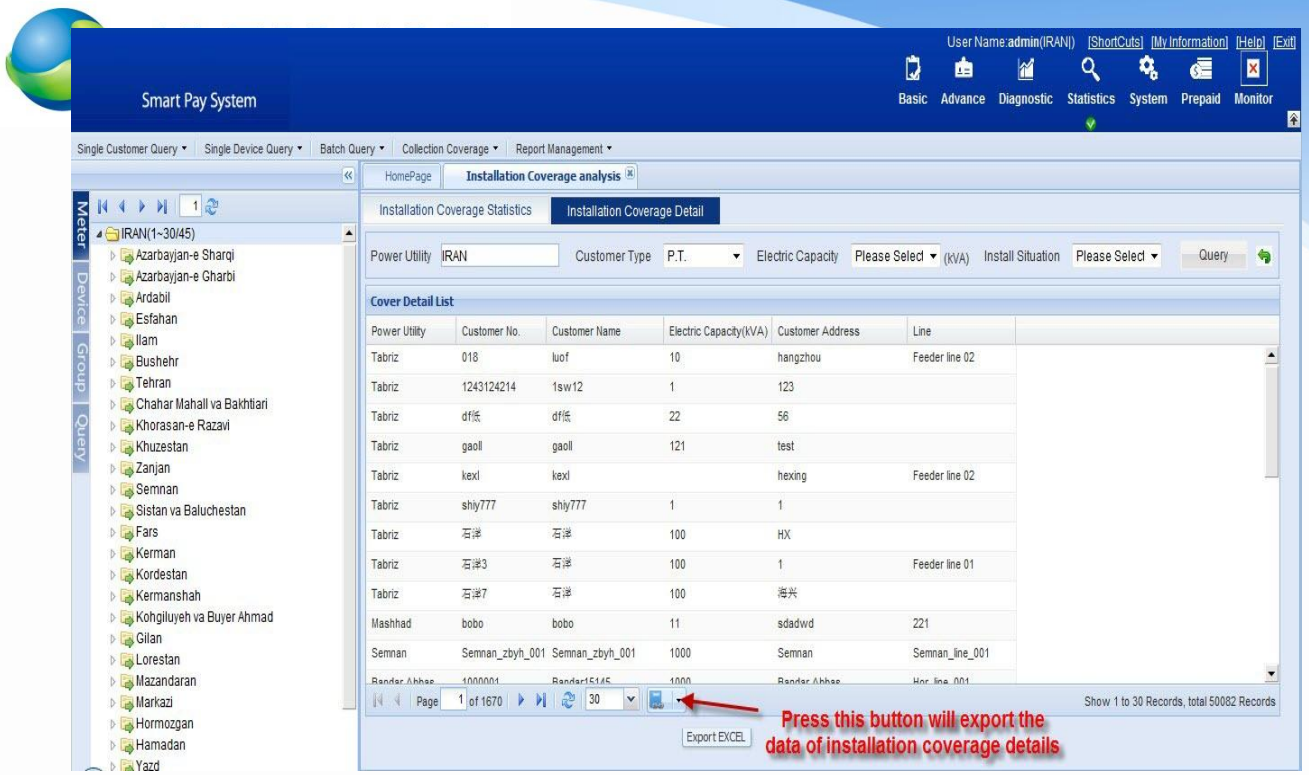


Figure 43740 Export installation coverage details

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